

100cc
MORE!
MOTORCYCLIST

Yamaha 850 Shaft-Drive Triple

JANUARY 1980

Motorcyclist



\$1.25

In Canada
\$1.50

**HONDA
CR250**

**First Test Of
The New
Red Rocket**

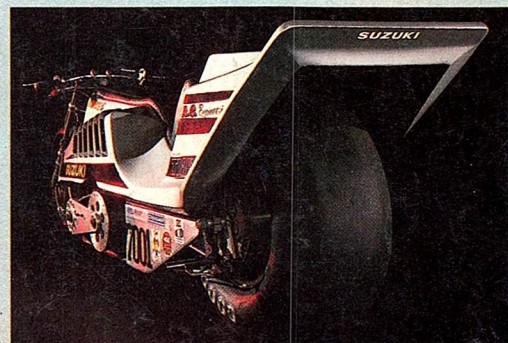
**Exclusive:
CAN-AM 400
MOTOCROSS**

**New Products
For The '80s**

**Tune-Up
How To:
CX500 HONDA**

**Ten Years After:
More Nostalgia
From The 1970s**

**5,000 Jam
To The Aspencade**



TOP FUEL BATTLESTAR



01

0

Our canyon and its

Our agile GS-550 comes in two slick versions this year.

One is the E model. Better known as the canyon cat.

And the other is our L edition. Which we tabbed the Low Slinger. Outfitted for cruising, it sports extended forks, pull-back handlebars, teardrop tank and chopped megaphone pipes.

Both the Low Slinger and the canyon cat are powered by a smooth 4-stroke DOHC mill. And both come with disc brakes front and rear, mag-style wheels, 5-way adjustable shocks, transistor ignition and easy-grip power levers.

Also, like all 1980 GS models, these bikes are backed by a 12-month unlimited mileage warranty.*

Which means Suzuki is with you wherever you go. Canyons or cities.

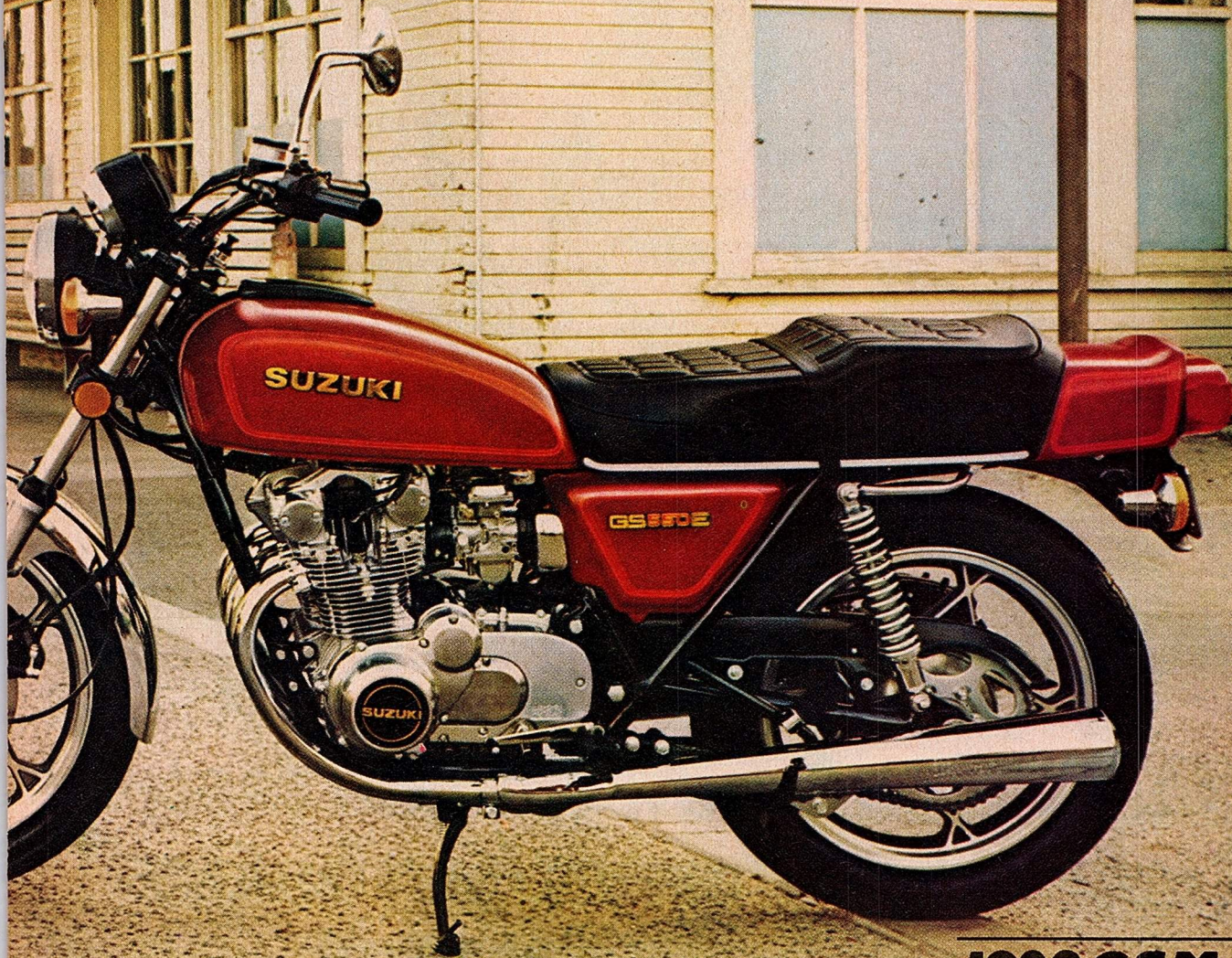


SUZUKI  **1980**
The Performer.

Ride safely. Always wear a helmet, eye protection and appropriate riding apparel. Member Motorcycle Safety Foundation



cat cruisin' cousin.



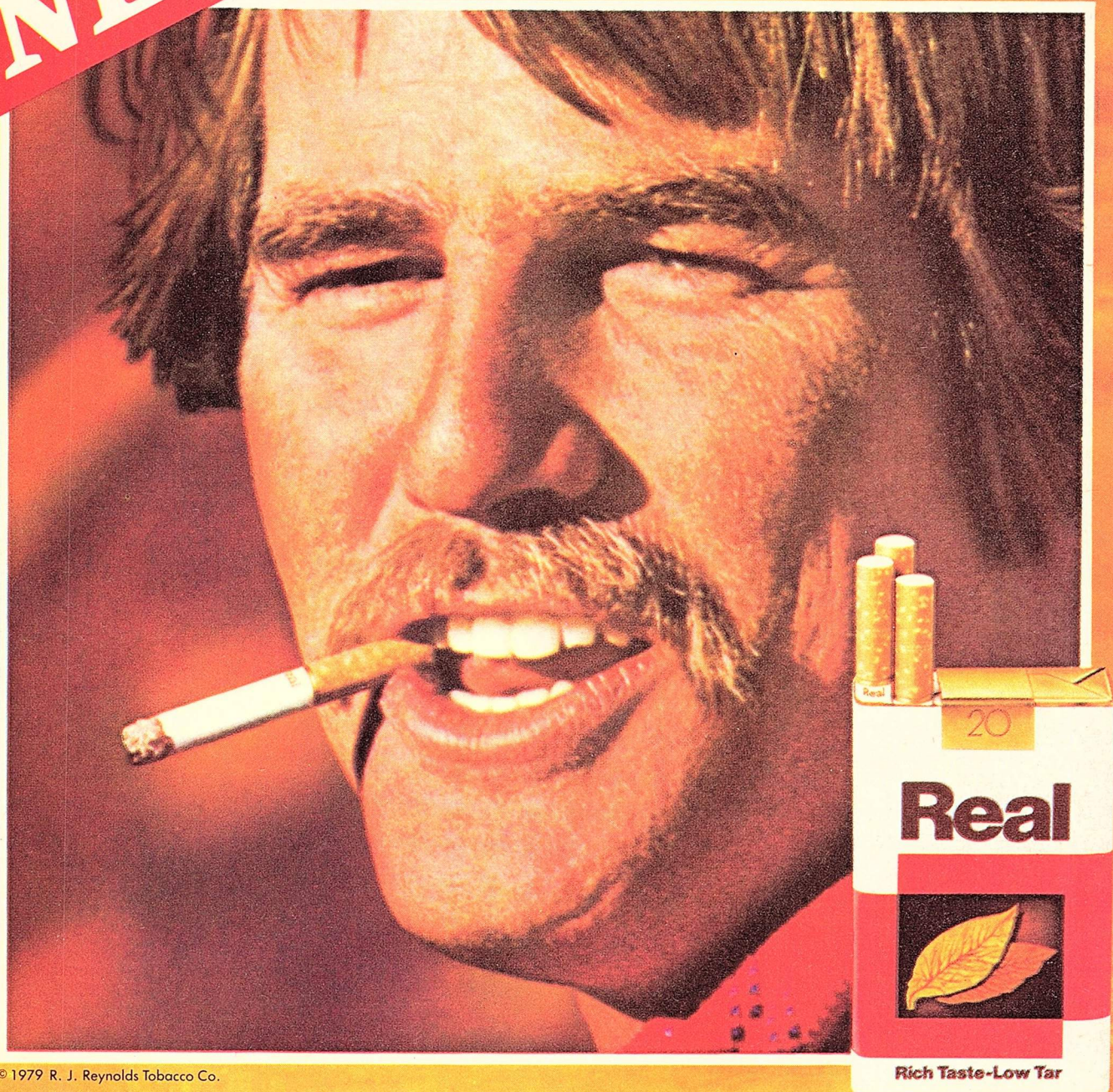
1980 GS Model
TWELVE-MONTH UNLIMITED
MILEAGE WARRANTY*

*See "Limited Warranty" brochure for details. This warranty furnished only in the 48 contiguous United States and Alaska.

NEW!

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

10 mg. "tar", 0.9 mg. nicotine av. per cigarette by FTC method.



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Richer...mellower than before"***

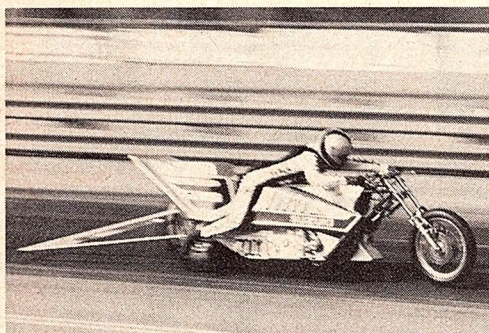
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Tastes richer...mellower...more satisfying.
A taste that's pure gold.

The smoking man's low tar

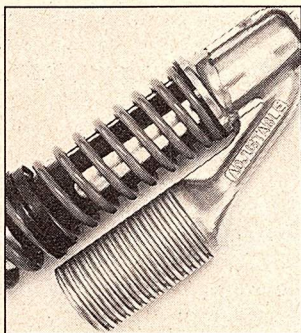
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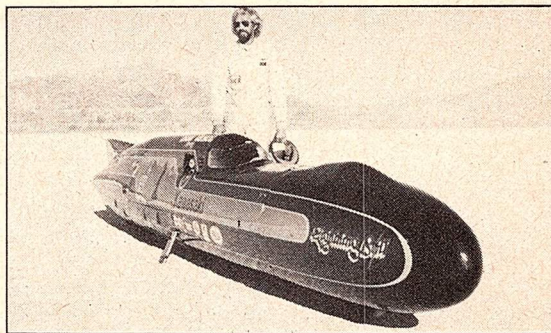
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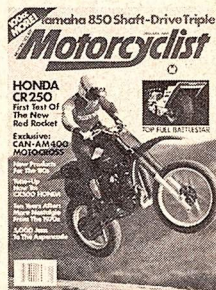
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COVER



Honda's CR250 motocrosser is the fastest 250 berm bouncer we've ever tested. Its competition had better beware. To learn more about the star of Galactica Drag Racing, see page 20. Photos by Art Friedman and PPC's Mike Levasheff.

EDITORIAL

DO IT NOW

Have you been thinking about one of these days buying that dream bike and dusting off turbo Porches on the way home from work, or getting the ultimate dirt bike and carrying out some heroic personal odyssey you'll savor the rest of your life? Or maybe your dream goal is a trek to Tierra del Fuego on your old DT-1. Maybe you've been planning to ride your bike through every one of the 50 states and you've got 48 still to go. We've all got personal motorcycling goals to fulfill. "To fulfill." That's the key phrase. Whatever it is, we haven't done it yet. It's always been, "One of these days; I'm going to . . ."

Well, if "one of these days" is ever going to arrive, it had better be soon; like right now. This year. This month. Today. Time is running out.

We grew up in a world of boundless prosperity, when the average working stiff could live a life of luxurious plenty the envy of any emperor in previous centuries. Two big reasons why we had it so good after WWII: Military power. Oil.

No question about it, the USA was top gun after the second free-for-all. When we said "frog," everybody hopped. Nobody thought seriously of crossing jolly old Uncle Sam. He was too good a shot. About the only folks who tried now and again were those nasty "Reds," but if they really riled us, all we had to do was frown meaningfully—as in the Cuban Missile Crisis—and they would back off, hands palm out, saying, "Heh, heh, just kidding." As a result we bought whatever raw materials—including oil—we needed to fuel our economic juggernaut wherever—and practically at whatever price—we wanted.

Alas, that golden age has run aground and its disintegration has begun. Russia is the world's premier military power and does whatever it feels like doing, from Angola to Viet Nam.

And Russia is running out of oil.

Right now she is at her peak as the world's biggest producer, but she easily consumes it all and faces insurmountable technical problems in recovering further reserves locked under Siberian ice. Beginning in 1982 Russia will have to start importing oil. From the same guys we buy it from. The trouble is,

OPEC doesn't take jovial bear hugs for payment: you want OPEC oil, you pay with hard currency; dollars, marks, yen. Russia doesn't have any hard currency. You can't exchange rubles for much of anything, except maybe Polish Zloties. So when the Russians run out of oil, they won't be able to buy any. Comments former Air Force Secretary Thomas Reed, "It is unlikely the Soviets will allow this situation to develop." Some speculate that they may offer payment in gold, or platinum, of which they have half the world's supply. Others believe they will move into the Persian Gulf and take the oil they need.

Can they really do that? Since the end of the Viet Nam war the Russians have spent staggering sums on arms. When they last showed their hardware publicly during the Middle East confrontations of '67 and '73, they had, according to Secretary Reed, quoted in *Aviation Week*, "outmoded, poorly protected strategic weapons systems . . . By 1982, when the next crisis comes along, things are going to be different. The Soviet Union is modernizing its strategic forces at a prodigious rate. They will then be at their energy deadline and will try to solve their problems by means of the Mideast at the expense of the free world."

It won't be a nuclear war because for the Russians it doesn't have to be. It will be a conventional war of tanks, fighter planes and men on their bellies in the Saudi sand. It may take several months, or even a year, but Russia will win, because they have more tanks and more planes and more trained soldiers than us and our allies. We can't force them to stop by threatening a nuclear strike because they will laugh, knowing that their greater atomic arsenal can render most of our strike ineffective and then blast our biggest cities to smithereens. And it isn't likely, considering our present leadership, that America will tell the Reds to stuff SALT II and go on a building-binge of conventional weapons. Even if we started today it would be unlikely that we'd be a formidable foe in a 1982 ground war against Russia. They've got us on this one. And it's the Big One. All our previous fighting for ideologies had vastly different consequences than losing

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THIS YEAR'S NEWEST, COSTLIEST 250

More travel, more power, better handling and much more . . . it's all there in the new Maico M-1. A new frame, new forks and rubber mounted bars produce the plushiest ride and surest steering ever. It's a clean, lean profile with a low center of gravity, good ground clearance and a seat height you'll like.

A 40mm. carb, bigger air box, new cylinder transfer ports and a snake-like pipe configuration increase usable horsepower. Travel? There's 12.2 inches up front and a full 12 in the rear.

Big changes and little refinements too, it's all here. Like a new plastic gas tank that mounts without bolts. Maico engineers compare the importance of the M-1 design to forward mounted shocks. That single change sliced at least two seconds off average lap times. The M-1 accomplishes a similar improvement...a two second advantage in a single model year.

So don't compare price tags this year without checking out total bike performance. You are going to spend more for any racing bike you buy this year. Why not spend a few dollars more for a Maico. You're going to get a lot more motorcycle for your money.



"The M-1 is a blast.
It's an all-new
way to ride!"

Magoo



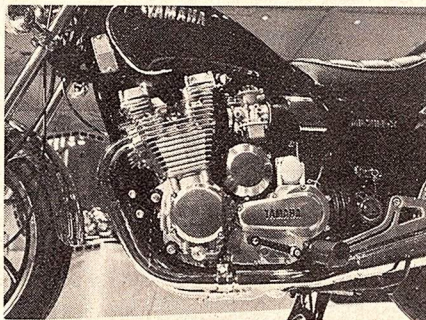
HOTLINE

THE 1980 YAMAHAS: SPECIALS GALORE

Leading the list of new Yamahas is a DOHC 650cc four called the Maxim I. Weighing in at about 450 pounds with over 60 hp, the Maxim promises to be a performer. The engine is kept narrow by a CBX-style jackshaft for the electrics and the seat height is kept low—about 30 inches. One nice feature is a built-in cable lock. "Special" styling is the only styling available.

The Dark Stars of the 1980 Yamaha line are the Midnight Specials, limited-edition 850 and 1100 Specials finished almost entirely in black with gold trim including a 24-carat plated gas cap. If you like the Specials, these are the ultimate.

The ultimate commuter bike may be the Exciter II, a bike built around a new



The new 650 four is called the Maxim.

250cc, 21-hp single. It features a quick-release trip-trunk-like storage compartment. A passenger seat may be snapped on in place of the trunk. Three other bikes share the same four-stroke engine: the Exciter I (the same without the luggage box), the dual-purpose XT250 and the dirt-only TT250. Other new Yamahas include the YZ465 motocrosser, the IT425 enduro and a replica of Kenny Roberts' world championship YZR500 roadracer which will be sold to about 20 select, wealthy riders.

There was no sign of any two-stroke streeters including the watercooled, monoshock 250 and 350 street bikes being sold in Europe. Those might have been the most Special bikes of all.



The Midnight Special will be expensive.

ROBERTS TRIES CARS

Kenny Roberts will attempt his first major car race early in February at Daytona's International 24-Hour Endurance Race. He'll drive a Herb Adams Fire-Am in the GT Touring Class against Ferraris and other exotica. Its 455 c.i. engine will produce 160 mph—a little less top-end than his 30 c.i. YZR Yamaha roadracer. Kenny's co-drivers will be off-road star Walker Evans and Herb Adams, who fathered the Trans-Am as a Pontiac engineer. The whole deal was put together by Goodyear. A week later Kenny will be back on bikes at the Winston Pro opener at Houston where he hasn't ridden in three years.

SHEENE ON YAMAHA

After a disagreement on team management with Suzuki, two-time world 500cc roadracing champion Barry Sheene has started his own team with independent sponsorship and ordered four Yamaha roadracers, two 500s and two 750s. This leaves Suzuki, who recently dropped motocrosser Gerrit Wolsink and lost former champion Roger DeCoster, with a conspicuous lack of established talent in either the roadracing or motocross World Championship arenas. They are reportedly talking to South African Kork

Ballington, who has taken double (250 and 350cc) world roadracing championships for the past two years on Kawasaki. Sheene had ridden Suzukis for seven years.

NHTSA BACKS RADAR FOR POLICE USE

Remember those court cases a while back that gave police radar a bad name? You know, trees being clocked at 80 miles an hour and the like. The general conclusions drawn then were that a lot of radar sets, especially the cheap ones, aren't all that reliable and many of the constables on patrol operating the devices haven't been all that well trained. Well, either the NHTSA wasn't listening or didn't like what it heard, because National Highway Etc., which has been readying a report on batcar beepers, is rolling up the taffeta sleeves of its designer blouse preparatory to hurling a many-paged report on police radar at us speed-crazed taxpayers, the gist of which, we understand, will be the finding that all radar units throughout the country are all okay. Any errors in handing out speeding tickets are blamed on dumb cops.

We suspect NHTSA wants radar as a tool for enforcing the 55 mph speed

limit: they want it to have the prestige and authority of official government approval and don't want to know that at its present state of development it may not be reliable. The radar industry is stirring uneasily at the distant rumbles issuing from Washington. Maybe if the NHTSA report turns out to be a real Stalin-style reshuffling of the facts they will saddle their lawyers and fight.

MOTORCYCLES REALLY DO SAVE GASOLINE

The Motorcycle Industry Council has just released some interesting figures we hope the dudes at the DOE take time out from Xeroxing interoffice memos to peruse and ponder. According to the MIC, motorcycles annually explode 5,773,083 gallons of the Seven Sisters cracked finest in their cylinders while darting along the roads of Los Angeles county. Sounds like a lot of gasoline, but L.A. automobiles imbibe 2,010,179,955 gallons of Arab elixir each year. Now if various federal, state and local organizations, not to mention misguided mom's groups and the like, had their way and got motorcycles banned, and automobiles had to be used in place of motorcycles, Los Angeles county would burn an additional 15,815,841 gallons of our nation's precious petroleum fuel supplies each year. You can imagine what a disastrous impact on gasoline availability the nationwide banning of motorcycles would have. Maybe if we press this point home to our government representatives we can get DOE to swivel its 16-inch main batteries around to bear on the headquarters of the NHTSA.

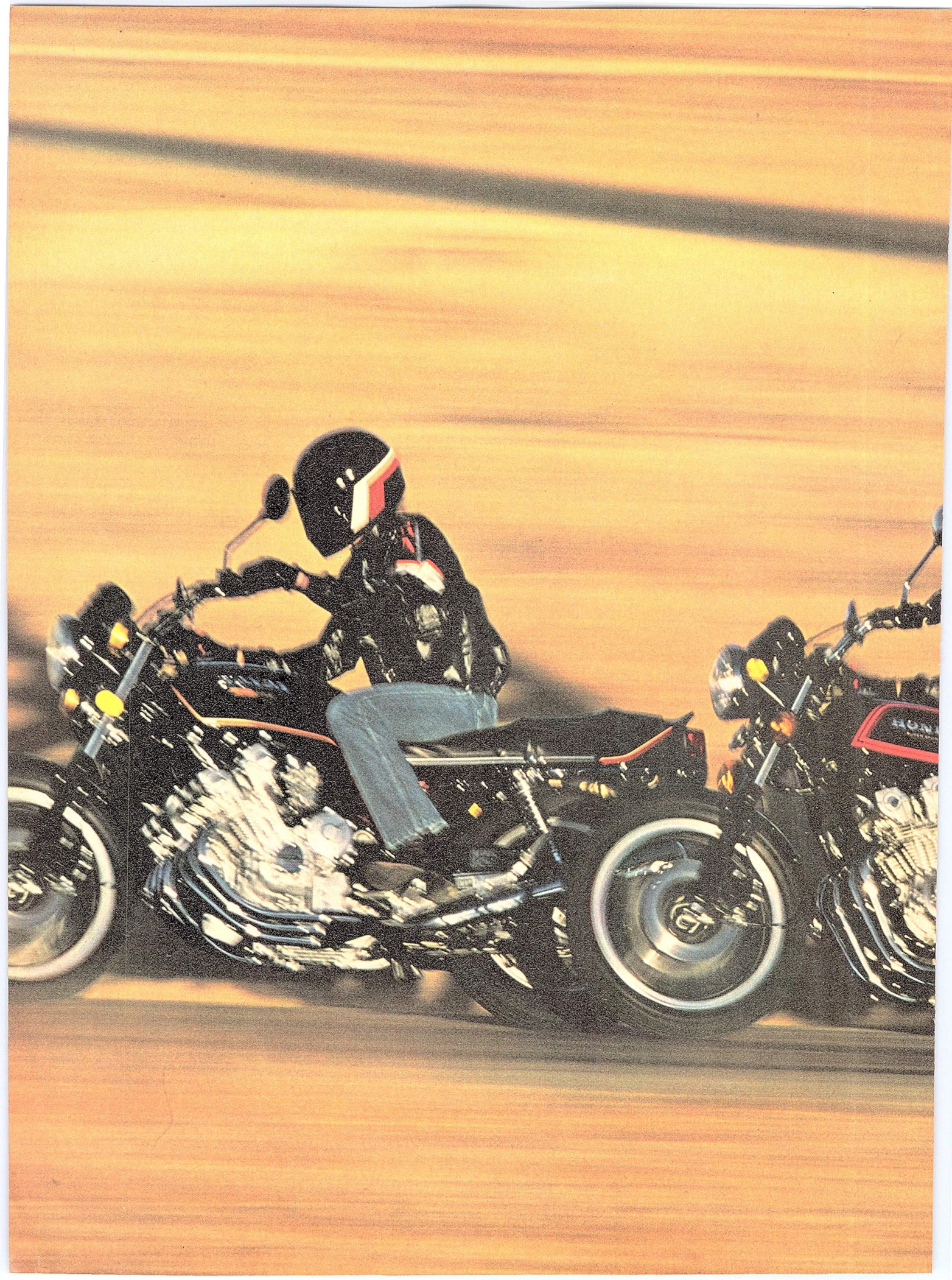
WHAT DO SHAFTIES MAKE ON THE DYNO?

It's hard to get dyno horsepower figures for the new breed of shaft-drive touring bikes because most dynamometers are designed to hook up with a final chain drive. Motorcyclist uses the Webco dyno to obtain "real world" horsepower figures for the bikes it tests, and it just can't handle the shafties.

But the German motorcycle magazine *Motorrad* recently got access to a dyno that could handle the shaft drivers. They tested six makes. The results: Both the Honda GL1000 Gold Wing and the BMW R100RT registered 50.71 horsepower on the scale, the GL at 7250 rpm, the BM at 6800. The Moto Guzzi 1000 G5 delivered 40.57 hp at 6000 rpm; the Yamaha XS750E produced 51.72 hp at 7500; the Suzuki GS850EN dished up 63.34 hp at 7700 rpm; and the Kawasaki KZ1000ST stomped out a whopping 73.02 horsepower at 7500 rpm.

**THE HONDA
HIGH PERFORMANCE
SERIES.**

**THEIR ONLY COMPETITION
IS EACH OTHER.**



FOLLOW THE LEADER.

Once you decide to go for it, there are no compromises. You've got to have the one machine that dominates its class.

And this year, it doesn't matter if the class is 400 cc, 750 cc, or 1000 cc. The machine is a Honda.

So when you decide to be out in front of everyone else, there's only one decision left to make. How far.



Photographed with professional riders at Willow Springs International Raceway.

OUT THE DOOR. ON! INTO THE RECORD B

Out on the racetrack, you'll see exactly what makes one motorcycle better than another. The power. The acceleration. The reliability. The handling. The brakes. And that's where these total performance machines have been proving themselves. Again and again.

THE CB750F

Back in 1969, we introduced the first Honda 750. And it made such an impression on the critics that they invented a whole new word just to describe it.

Superbike.

In 1979, we introduced a completely re-thought version of this phenomenal machine. And the critics didn't waste any time getting it out on the track. In fact, if you picked up a motorcycle magazine with a road test of the CB750F, there's only one way to describe the reviews.

Raves.

Take a close look at the 1980 CB750F

and you'll see where all the excitement is coming from. Start with the engine. A 749 cc DOHC powerplant with a Pentroof™ combustion chamber and 16 valves that just breathe horsepower. Four 30 mm CV carburetors with an accelerator pump. And pointless inductive ignition.

Then look at the way it handles. Those tuned, four-into-two pipes tuck right up under the frame rails for lots of clearance. Because we designed everything to work together. The tough, double-cradle frame. The geometry. The low-stiction forks. The needle-bearing swingarm pivot. The aluminum-alloy ComStar™ wheels. The tubeless tires. The all-new externally-adjustable 30-setting shock absorbers. And thanks to those three big disc brakes, it stops as well as it goes. We don't have to say much about the



TO THE TRACK. LOOK.

styling here. Because if you own a CB750F, you'll love every last detail. And if you don't, you just can't appreciate all those tremendous little touches.

You'll be so busy trying to catch up, you'll never get a good look.

THE CB400T HAWK™

Take a look at the 410 cc Box Stock Class. You'll see the 1979 AFM Number One plate—on a 1979 Hawk fitted with low handlebars and roadracing tires.

And for 1980, you'll see the same big-bore, ultra-short-stroke, high revving 395 cc twin. The same three valves per cylinder, Pentroof™ head, 30 mm CV carburetors, hot-sparking electronic ignition, and exclusive Power Chamber™ exhaust

system. All pumping red-hot gobs of horsepower into a new quick-shifting, six-speed gearbox.

But this year, you'll get all this record performance in a brand new package. Because now the Hawk has the same all-business styling as the other two all-out machines in the Honda High Performance Series: the CB750F and the CBX.

HONDA

FOLLOW THE LEADER.



ALWAYS WEAR A HELMET AND EYE PROTECTION.
Specifications and availability subject to change without notice.
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For a free brochure, see your Honda Dealer. Or write: American Honda Motor Co., Inc., Dept. 4191, Box 50, Gardena, California 90274.

THE MAXIMUM STATE

THE CBX

This is more of a motorcycle than you've ever known. More acceleration. More performance. More breakthrough technology. And it tells you so. Even when it's just sitting there, with those six pipes shining in the sun.

This is it, all right. Six cylinders. 24 valves. 1047 cc. Far and away the most impressive motorcycle in the world.

But no matter how much you've heard about the CBX, you'll never know how much of a motorcycle it really is. Not until you take it in both hands and climb on board.

Start it up. The engine is smooth and quiet. More like a luxury sedan than the world's most intense motorcycle.

Slip away from the curb. Maybe you were expecting a thoroughbred sports machine like this

to be high-strung and twitchy. But it's not. Even in stop-and-go traffic, the CBX is docile, cooperative, and predictable.

Then head for the backroads. And brace yourself for the experience of a lifetime. You knew it was going to be fast. You knew it was going to perform. But you didn't know it was going to be anything like this.

Obviously, this is a motorcycle you'll have to know more about.

And the best place to start is with the handling. Because we designed the chassis specifically to work with the tremendous torque the engine produces. By making the engine itself a stressed member of the diamond configuration frame. For maximum flex-resistance.



EMENT.

Then we engineered the suspension to match. In front, you'll find low-stiction, adjustable air-forks. And the rear shocks can be adjusted in only a few seconds. To a total of 30 different combinations of compression damping, rebound damping, and spring preload.

The V-rated tires are tubeless, with a special tread pattern designed especially for the CBX. The black highlighted aluminum alloy ComStar™ wheels have triple discs. And the superb cornering clearance lets you get the most out of the suspension.

Now then. About the engine. Volumes have been written about it, but they can all be summed up in one word: More.

Because this is a 1047 cc DOHC Six. With a high-performance Pentroof™ head. Four valves to the cylinder. And a big-bore, short-

stroke design that takes the redline a lot higher.

With six 28 mm constant-velocity carburetors and an accelerator pump, you get instant throttle response. The pointless inductive ignition delivers red-hot sparks right on cue. And the five-speed transmission shifts crisp and easy.

The CBX.

It says more about its rider than any other motorcycle in the world.

To some people, it may seem like too much.

But once you really get to know the CBX, nothing else will ever be quite enough.

HONDA
FOLLOW THE LEADER.



ALWAYS WEAR A HELMET AND EYE PROTECTION.

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For a free brochure, see your Honda Dealer. Or write: American Honda Motor Co., Inc., Dept. 4191, Box 50, Gardena, California 90274.

Nobody in the motorcycle business has more confidence in their products than Suzuki. And to prove it, Suzuki is

backing all 1980 GS streetbikes with a 12-month unlimited mileage warranty.*

That's right, 12 months. One solid year.

Nobody else offers a warranty that good. But then

nobody else offers streetbikes as good as Suzuki.

*See "Limited Warranty" brochure for details. This warranty furnished only in the 48 contiguous United States and Alaska.



**NOW THE BEST
BIKES COME
WITH THE BEST
WARRANTY.**

SUZUKI  **1980**

The Performer.

LETTERS

SHE UNDERSTANDS THE PAIN

To Prof. Harry H. Hurt: I am the mother of a motorcycle accident victim and when my son brought this magazine (Aug. Motorcyclist containing the Hurt Report) home and I read the statistics, I just had to write and tell you my son was hit at night by a 68-year-old woman. The woman made an illegal left turn in front of him, he hit the driver's side of the car, shot over the handlebars into the car and pivoted over the top of the car. When I saw him lying on the stretcher in the emergency room I could not believe it was my boy. From his eyes down he was mutilated, a mass of hanging flesh, his jaw bones hanging over the back of his tongue choking him, his left femur crushed, knee bones protruding, the mid-calf bones broken through the skin. I have been a nurse for 26 years and I could not believe it. The surgeon could not believe it either.

My son's helmet I have here before me, an Arthur Fulmer. Only the face plate cracked up the middle. The helmet saved his life as was stated in the article.

He will be crippled forever, but not completely handicapped. He had been a record-holding track star for five years, and a champion roller skater. Now he has no teeth. They spent 12½ hours in surgery putting him back together. His accident was witnessed by two policemen: he wasn't doing 25 miles per hour. The woman's excuse was "I didn't see him," and probably she didn't. When you see one light coming, you really don't know if it's a car with one light out or what.

So I just want to tell you I appreciated your report, but it should be in other publications rather than just a motorcycle magazine. Automobiles have little respect for motorcyclists, because they have been glorified by the Pagans, Hells Angels, and other gangs. Hollywood has made a Rep for anyone who rides one.

If automobile drivers can ever learn to respect the rights of others and not label everyone on a bike as a Rogue or Hells Angel, we'll all be a lot safer.

I'm so glad someone cares enough to research the whys of accidents on motorcycles. Thank you so much for it.

Mrs. N.L. Ammens
Spotsylvania, VA

FOUR-WHEELED MOTORCYCLE

Your editorial "Ned and Sarah" was interesting but incomplete. May I add the following: 1. Motorcycles are a very limited solution to the energy crisis because they fall over when put in a stressing situation. 2. While there is likely more oil

available than appears on paper we are consuming oil faster, much faster, than Mother Nature is producing it. 3. Why not push for "four wheel motorcycles"—tiny cars with bike engines. After all, you are partly right—the motorcycle-sized vehicle powered by a motorcycle engine is the most immediate answer. Solutions beyond 1985 are too late—by then we'll be "owned" by petroleum consortiums of one kind or another the way we are all "owned" by the DOT, DOE, HEW bureaucracies today (we are no longer governed by Congress and the President). 4. You'd be wiser (and glad) if you keep cycling as a sport rather than basic transportation. You know why.

Thanks for the opportunity to talk back.

Warren J. Pegram
Glen Rock, PA

REBUTTAL

To The "Chick From Disco Land":

How can you hear the exhaust from a Harley or any other sled with Donna Summer and the Bee Gees and all that disco debris blowing in your ear?

As for our motorcycles: we save enough gas each day so you can drive your pig hog gas-guzzling car to the disco! Think about 50 mpg for us and the 15 mpg your hog gets if it's lucky.

As for our looks: Everyone has a right to dress the way they want (even you). As a biker, I'm proud of the way I dress and ride.

As for being clean: Some of us work for a living instead of sucking off Mommy and Daddy for disco money.

As for our ladies: I've got a main squeeze that will no doubt put you to shame.

We Virginia Beach Bullfeathers are Harley-Davidson bikers who love rock 'n roll and hate disco. Here's a poem for you: Disco Jeans, Disco shoes, Disco Sucks, And so do you!

"Doc"
Virginia Beach, VA

MOTOCROSS HISTORIAN

I am gathering material for a book about the history of motocross. The book will include from pre-Greeves to post Maico Magnum II. I would be grateful to receive help from your readers. I need material covering this period. I can use photos, articles, manuals, brochures, or? I also need personal accounts, whether a good story or just a comment about a particular bike's traits. Nothing is too trivial, anything may be helpful. Anyone wishing to help should send material to: Blaine

Archer, 1227 S.W. 18th #3, Portland, OR 97205.

Blaine Archer
Portland, OR

GETTING SOFT ON CONTINENTAL

Greatly enjoyed the article "Race Tips for Street Bikes" in your September issue. We appreciate both the mention of Continental tires and the recognition of their high mileage characteristics. But I would like to take issue with your discussion of "soft" versus "hard" tires.

With a shore hardness of 59 Continental has one of the softest rubber compounds. As such, they stick very well on wet and dry roads. The reason for Continental's popularity is the very fact that here is a soft sticky tire with extremely good mileage.

We invite you and your readers to feel the rubber of a Continental motorcycle tire and you will notice the difference, especially when compared with other tires.

Arnold van Ruitenbeek
Vice President
Continental Tires
Fremont, CA

TRIUMPH SABOTAGE

I would like to commend your recent article about the history of Triumph. It helped explain why my European vacation was almost ruined when I bought a new Bonneville in Amsterdam, Holland, in 1972.

The bike had evidently been sabotaged because the oil lines were completely packed with dirt, and I think someone in the factory was responsible. According to your article this was the time when labor troubles were brewing in the English factories, soon to be followed by a lock-out by the workers.

After a week of fruitless efforts to get the machine running, a sympathetic Dutch dealer exchanged the Triumph for a Honda 350 Four which I ride still.

Again, thank you for the informative article.

Dan L. Schmidt
Pearsall, TX

Readers' opinions are invited for this column. Unfortunately, no personal replies can be made to letters. Motorcyclist will publish as many letters and responses as space permits. Mail letters to LETTERS, Motorcyclist Magazine, 8490 Sunset Blvd., Los Angeles, CA 90069.

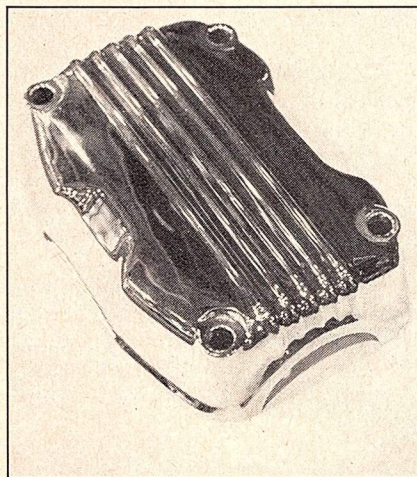
NEW AS 1980

Notable accessories from the show you couldn't attend

As winter freezes out the touring season and racing championships are wrapped up for another year, motorcycle accessory manufacturers meet in Las Vegas at the Dealernews Expo to show their wares for the upcoming season. The public and dealers aren't invited; the show is for accessory distributors only. What follows are some of the more interesting items on display. Equally notable was what didn't show up. After this year's fuel shortages, we anticipated oversized gas tanks for touring bikes. There weren't any. Another need is for a brightly colored touring jacket or riding suit, which the Hurt Report pointed out is required for best visibility and safety. Unfortunately, all the new touring suits and jackets came in dark and dull colors. Maybe next year.

SUPER-ECONOMY GL1000 VALVE COVERS

If you own a Honda GL1000, you need to know about Drag Specialties' Gold Wing Valve covers. Say your GL gets knocked over in a parking lot and the valve cover gets scraped up, maybe has a hole knocked in it. You go to your friendly Honda dealer and ask his friendly parts man how much a new one costs. You better sit down for this part. The Honda price is an unfriendly \$62.40. However, there's somebody at Drag Specialties who lives in the real world. Their price on this cast alumi-



num, highly polished GL1000 valve cover is \$19.95. Or you can get it gold plated for \$40, which will leave you \$22.40 to make a nasty phone call to American Honda and complain about their parts prices. Spend 15 cents for a stamp and you can find out more from Drag Specialties, Dept. MC, 5401 Smetana Dr., Minnetonka, MN 55343 or call (612) 935-1000.

DETACHABLE SHOEI SADDLEBAGS

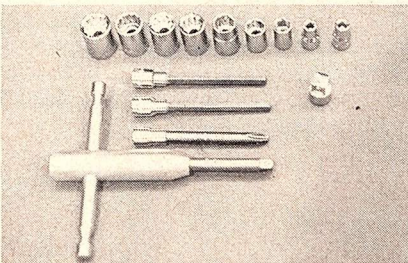
Add Shoei, the helmet people, to the list of detachable saddlebag manufacturers. The fiberglass SB-27 bags have a large capacity (enough to hold a full-face helmet and more) and universal bracketry. The bags have aluminum edging with rubber seals for "superior" waterproofing, rubber straps inside, wa-



terproof covers for the locks and a combination guard rail/carrying handle. They lock to their chrome brackets and a matching travel trunk is available. They come in white, silver, black, metallic blue or metallic red from your dealer or contact Shoei, Dept. MC, 1717 Pontius, Los Angeles, CA 90025.

CLEVER ALLEN AND SOCKET KIT

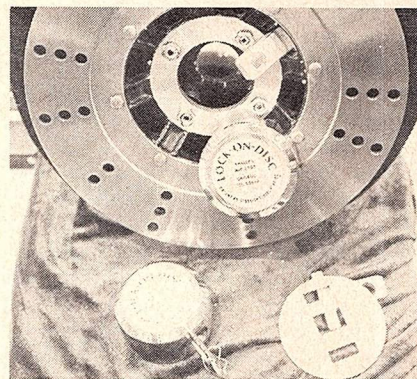
The Perry Wrench set is a compact, convenient socket and screwdriver kit featuring a clever, versatile cross-handle driver. The sliding cross bar allows plenty of leverage for stubborn bolts and screws when extended but still per-



mits speedy removal of bolts when centered. With its selection of 1/4-inch drive sockets and allen wrenches, the Perry Wrench set is a handy kit for tourers at \$21.99. Without the sockets it's \$14.95 from Perry Wrench Mfg. Co., Dept. MC, 1705 Stuart St., Berkeley, CA 94703 or call (415) 849-3429.

DISC BRAKE LOCK

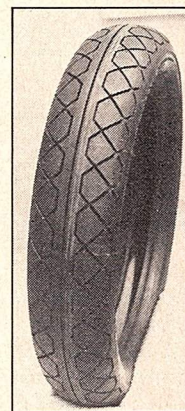
The Lock-On-Disc has a T-shaped hasp which is poked through a hole in a



disc brake carrier. The lock's bolt is then closed through a hole in the "bottom" of the T. With the lock in place the wheel can't turn very far and the lock's design makes it virtually impossible to cut or break. You can order one by phone if you pay the \$32.95 price by credit card. From Angler's Mfg. Corp., Dept. MC, Box 25141, Chicago, IL 60625, phone (312) 761-2811.

NOW, AN 18-INCH METZELER

Metzeler's V-rated "Sport" model superbike rear tire has proven popular among roadracers and sporting riders



as well as tourers, but it was only available in a 17-inch size, not the most common on sport bikes. Now it's finally available in an 18-inch diameter for about \$70 or \$75. Ask your dealer.

SCUFF-RESISTANT RIDING SUIT

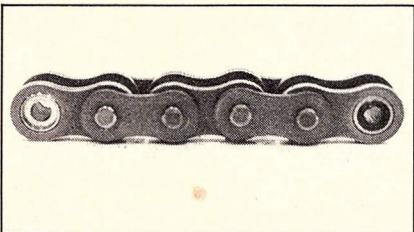
The Racemark riding suit claims to combine the abrasion resistance of leather with the fit and comfort of fabric. The suit is made by a patented process from seven independent layers of material: a water-resistant coated nylon exterior, five layers of polyester and a polyester nylon inner layer. The abrasion resistance comes from several factors. First, there are so many layers to grind through. Second, each layer's weave runs in a different direction. Third, virtually none of the minimal



number of seams is on a surface that a crashing body will slide on. Fourth, where there are seams, each layer has its own seam and the seams don't line up. Fifth, the layers aren't sewn together, so each one has to be torn by itself before skin reaches pavement. They say they tested it by dragging a volunteer around a racetrack and that he survived with his skin intact. The suit, which has pockets inside both the jacket and pants, comes in 22 men's and women's sizes. The suit's body is blue with a choice of sleeve colors—yellow, white or high visibility orange. It is available only as a complete suit (jacket and pants) for \$239. If you want more information or just want to volunteer for the next abrasion test, contact Yankee Silicones, Dept. MC, 1705 Foster Ave., Schenectady, NY 12308.

MONTEC HI-MILER CHAIN

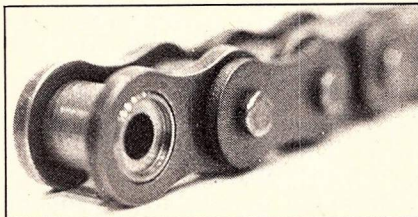
In concept this unique American-made O-ring chain exceeds the design of any other we've seen, including the exotic X and double-X-ring chains from D.I.D. in Japan. Montec is a Hartford, Connecticut, company which has made O-ring chains for years, including dirt versions popular in muddy Northeastern enduros and the ISDT. The new street chain is a sintered-bush type with no



rollers. All the oil it needs is an occasional light spray on the outside to prevent rusting. Its uniqueness comes from a recess milled for the O-ring in the outside diameter of the bushing. This recess means that the special high-temperature grease packed around the pin/bushing joint at the factory must force its way past two O-ring sur-

faces to escape—its side and top—thus providing the same two-lip sealing effect as the X-ring chain.

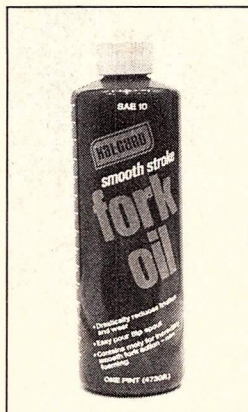
But the Montec has four major advantages: (1) Since the O-ring is recessed (as all O-rings should be ideally), it doesn't have to be compressed as much between the chain's side-



plates. Therefore the power-robbing stiffness associated with conventional O-ring and X-ring chains is far less. (2) The recess means the whole chain can be narrower, and (3) therefore lighter. Finally (4), the O-ring can't fall out, even if it breaks. Montec can supply endless lengths of 630 or 530 chain in any number of pitches, or you can use their Hi-Miler master link. For our money this chain was by far the most exciting new product at the Las Vegas Show. You can learn more about it in future issues of *Motorcyclist*, or by writing Montec Corporation, Dept. MC, 120 Amherst St., Hartford, CT 06106.

SMOOTH STROKING FORK OIL

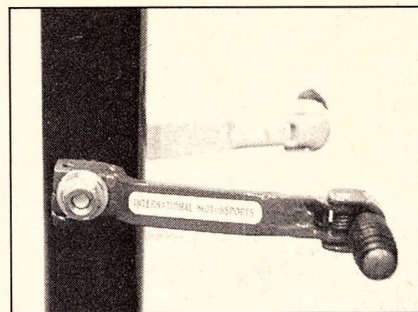
Kal-Gard, the lubricant and coatings people, now have a fork oil with moly. Claimed to reduce fork seal friction (stiction), Smooth Stroke fork oil is



available in 5, 10, 15, 20 and 30 weights at \$2.20 a pint or \$3.95 a quart. See your dealer or contact Kal-Gard at Dept. MC, 16616 Schoenborn St., Sepulveda, CA 91343, phone (213) 892-8674.

FOLDING SHIFTER

There are several folding shift levers on the market but none quite like the ones from International Motorsports. Each lever is made for a specific bike and comes in that bike's color—red for Mai-co and Honda, yellow for Suzuki and Yamaha, black for Kawasaki, etc. Since they are made of chrome moly steel, the levers are less likely to break or



wear the shift-shaft splines. The aircraft spring does not lose its tension and the pivot point is closer to the inside than any other lever. International Motorsports says their biggest business comes from people replacing the bendable folding levers that come stock on most bikes. The price is \$21.95 for brake or shifter. If no lever exists for your particular motorcycle, you can buy the tip only for \$13.95 and weld it to your existing lever. Have your dealer order from International Motorsports, Dept. MC, 3845 Stoddard Ave., Riverside, CA 92501.

CASTRE HOT-CROSS GLOVES

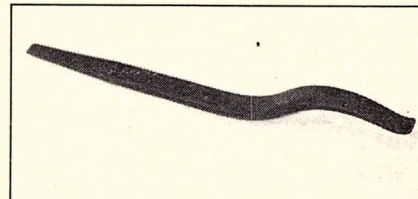
These model C-8000 motocross gloves are designed for use in hot weather. The usual Castre padded-leather Tri-Curve palm is topped by a special nylon-and-cotton back so the hand can breathe better and sweat can evaporate



quicker. In addition the wrist area is surrounded by a terry cloth band to soak up sweat. A Velcro closure adjusts its tension and standard pads protect the fingers and knuckles. \$23.95 from your dealer. Castre Inc., Dept. MC 836 Flory Mill Rd., Lancaster, PA 17601.

HIGH-POWERED TIRE IRON

Michelin's long (13 inches) tire iron gives you extra leverage to pry off stiff tires, and its unique bends give you



more clearance and let the irons move further when you pry. Result: easier tire changes. See your Michelin motorcycle tire dealer.

LEADING-LINK FRONT END

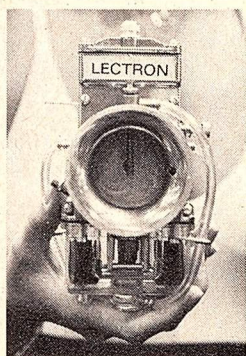
Former desert ace Rich Thorwaldson and S&W have combined efforts to produce this leading link front end for various motocross machines. The primary advantages of this type of suspension are less weight, less stiction,



reduced geometry changes as the front end moves and greater effectiveness on large bumps at ultra high speeds. S&W Stroker shocks provide about 12 inches of travel. The unit pictured here on a Honda CR250 will cost approximately \$500 complete and ready to bolt on. For more info write Thor Racing, 6905 Oslo Circle, Buena Park, CA 90620 or phone (714) 522-4571.

LECTRON CARBS FOR MOTOCROSSERS

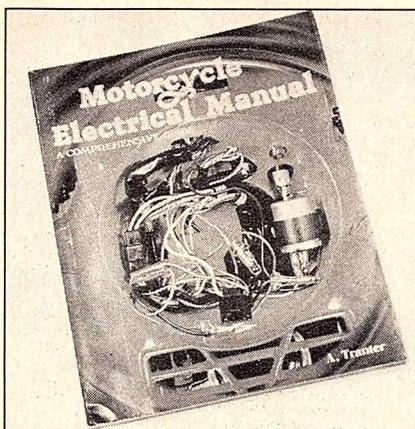
The Lectron Power Jet carb, a favorite of roadracers, is now available for all



Japanese motocross bikes from 125 to 400cc. Lectron claims a significant boost in midrange power. The price tag is \$99.50 from dealers or Lectron Fuel Systems, Dept. MC, 1800 Stephenson Highway, Troy, MI 48084.

ELECTRONIC MYSTERIES UNRAVELED

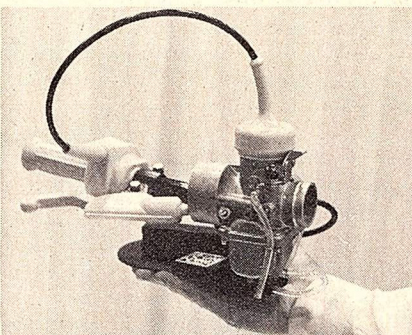
What do you do when your charging system stops working? Chances are that your shop manual is fairly vague and even many pro mechanics don't know how a voltage regulator works. Maybe the Motorcycle Electrical Manual can help. It's 128 pages of theory and practice on everything from handling light bulbs to how turn signal flashers work to troubleshooting charging systems. The MEM will probably tell what



you need to know to untangle the spaghetti of your wiring system and make repairs. At least you'll learn how that electrical system works. It's written by an Englishman and reflects some of the differences "over there," but it's a worthwhile reference for the home mechanic. The price is \$8.50 from Haynes Publications, Dept. MC, 861 Lawrence Dr., Newbury Park, CA 91320.

SUN LINE PROTECTORS

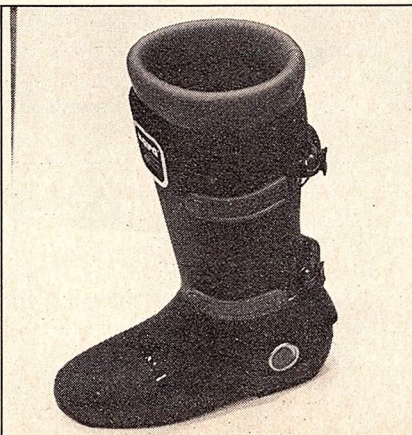
Dirt can get into your carburetor, lever pivots, throttle and handlebar ends unless you fit these plastic protectors colored in red, yellow or blue to match



your bike. They're new from Sun Line and sold on special bubble-pack cards at your dealer for \$12.95. Have him order from Sun Line, Dept. MC, 7045 Darby, Reseda, CA 91335.

NAVA PLASTIC BOOTS

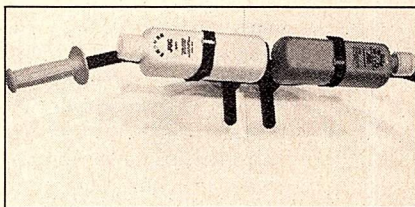
Italy's giant accessory manufacturer, Nava, is the latest company to market



a plastic boot for dirt riders. It's available in a cleated enduro sole or smooth MX sole and comes in sizes 8½ to 12. Special intakes route fresh air through the inner liner for cooling and each of the two snaps have a mechanical lock so trailside brush can't pop them open. Nava has purposely used softer polyurethane so the rider has at least some "feel" of the controls. The boots come in black or red for about \$115 from Nava dealers.

CROSS-BAR DRINKING FOUNTAIN

At \$12.99 complete with mounting bracket, the cross-bar mounted Enduro-Jug is a convenient way to carry something to wash the dust out of your throat or a handy reservoir for an extra quart of fuel. Or you can get two



(they'll both fit) and have both fuel and drink. Since the Enduro-Jug has some shock-absorbing qualities, it also functions as a cross-bar pad. It's available in blue, yellow or red from your dealer or Tumbleweed Enterprise, Dept. MC, 4301 Paseo Tortuga, Torrance, CA 90505 or call (213) 373-7044.

BOMBER JACKET

This cream colored Hein Gericke jacket designed in Germany and made in Korea comes in men's or women's sizes and costs \$146.50. Subtract \$7 if you



don't want a Zip-out/liner and \$7 for any lady's size. Pants to match your tumbled cowhide Bomber jacket cost \$129. Ask your dealer to order from Fitch Wyckoff International, Inc., Dept. MC, 305 N. Harbor Blvd., Suite C-8, Fullerton, CA 92632.

**There is nothing else quite like it
...on earth."**



RXM-1

With a new decade upon us there is at last a helmet that meets the needs of the rider of the eighties. In terms of safety, comfort and looks, other helmets are left in the past. Simpson RXM-1 has arrived. From an appearance and technological viewpoint unlike any helmet. Period.

With a shell made from space age Kevlar 49®, the RXM-1 is one of the lightest helmets you'll ever wear. And with a full range of hat sizes so the RXM-1 will fit the way a helmet should. The interior is lined with a smooth and comfortable brushed black special weave nylon, padded properly to hold the RXM-1 securely and cozily in place, during short rides or long. The RXM-1 is designed to cut through the air without annoying lift and wind noise. Even proper ventilation has been provided with a unique air flow system. Available in five brilliant epoxy finishes. Replaceable flip-up eye port shield and Snell 75 approved. No wonder professionals like Indy winner Rick Mears choose the Simpson RX Series of helmets. Without a doubt, it'll be the most extraordinary helmet you'll ever own ...

Color: (circle one) Indy Red, Sun Yellow, Comp Silver, Jet Black, Powder White
Size: (circle one) 6-7/8, 7, 7-1/8, 7-1/4, 7-3/8, 7-1/2, 7-5/8, 7-3/4

Name

Address

City State Zip

Enclose \$195.50 in personal check, money order or use your VISA or Mastercard.

Credit Card No. Exp. Date No C.O.D.'s please

For super-fast delivery call us at (213) 325-3575 and have your credit card # ready. Allow 3 weeks for delivery on orders placed with personal checks. All foreign orders add 10% shipping charges and must be prepaid in U.S. currency. Call residents add 6% sales tax. Send 50¢ for the Simpson Helmet story and 1980 color catalog.

SIMPSON SPORTS
22630 S. Normandie Ave. Dept. MC
Torrance, CA 90502

SIMPSON

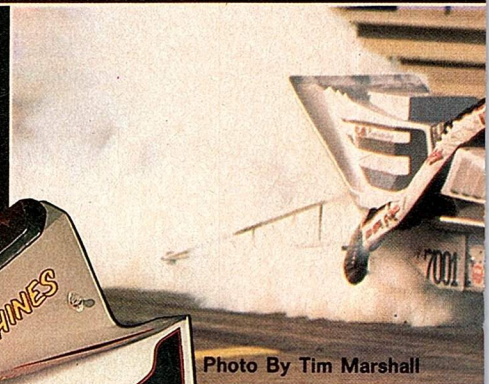
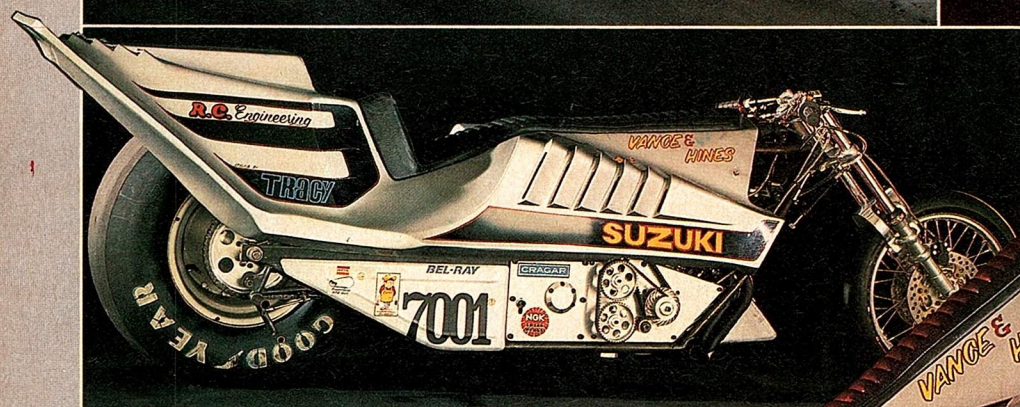
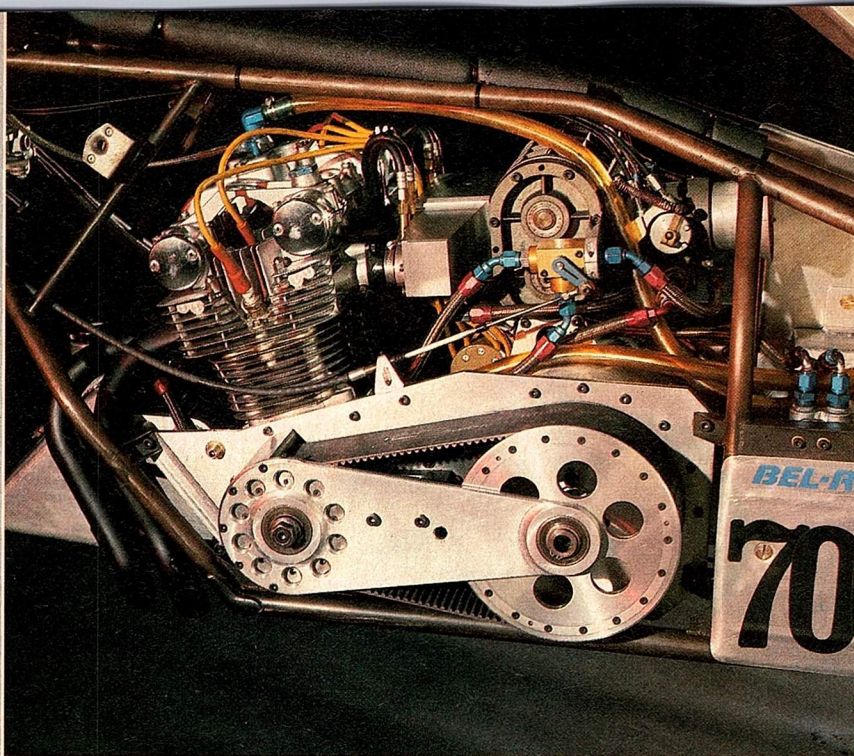
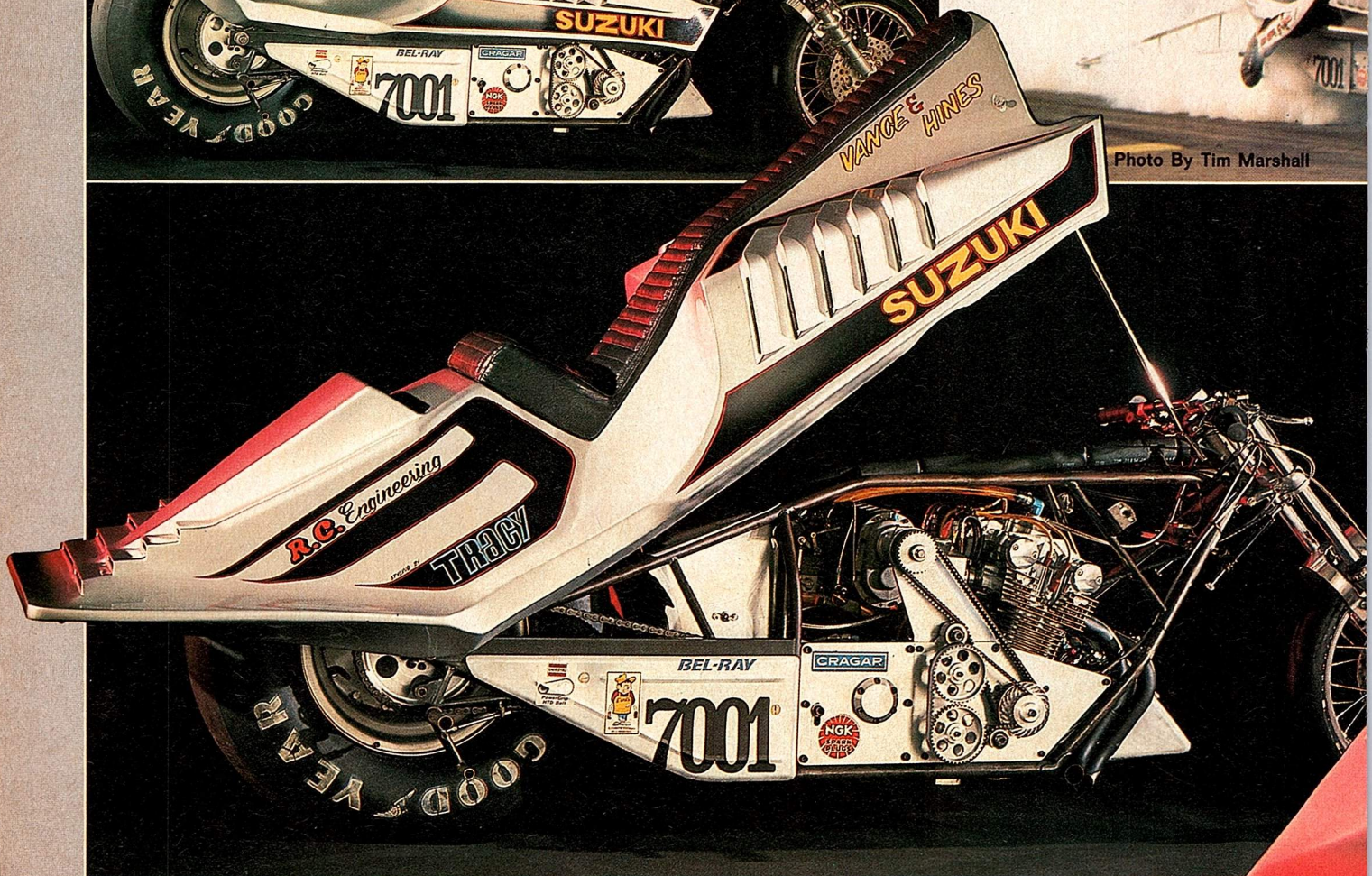


Photo By Tim Marshall



PHOTOGRAPHY: MIKE LEVASHEFF

TOP FUEL BATTLE STAR

FUNNY BIKES COME
TO DRAG RACING

The term "funnybike" entered the American language last summer. It was coined at Indianapolis when the new Byron Hines/Terry Vance Suzuki Top Fuel dragster rolled out of the pits and up to the starting lights for the first time, and waves of motion rippled through the stands as person after person rose to get a better view of this curious, surprising, beautiful apparition from the future. They liked what they saw. It didn't matter to the fans—mostly car freaks—that the bike failed to qualify: what set them stomping their feet and cheering was the Star Warrioresque Tracy Design fiberglass body that shrouded the frame and motor of the machine, streamlining it and giving it a look such as no other motorcycle built to



challenge the quarter-mile has ever had. Aerodynamics had finally come to two-wheeled drag racing.

"This will revolutionize drag racing; it's the beginning of a whole new era," says Tracy Nelson of Tracy Design, the man who designed and built the body you see on the bike here, and who is readying a front air dam to cover the fuel tank and a fairing to cowl the handlebars and front forks. "These guys only think of more and more horsepower for quarter-mile speed," says Tracy. "They don't think about the tremendous wind inertia at 185 miles an hour."

That may have been the way it was before Indianapolis. But with horsepower and reliability approaching a critical balance, only aerodynamics offers the promise of making 200-mph terminal velocities routine. There will be more funnybikes. But for now the Vance/Hines machine is the only one.

Two hundred miles an hour—or even the 180 the machine has run so far—is a hard figure to really comprehend; even harder to comprehend is the fact you can reach that speed, 293 feet per second, after a dash of only 440 yards, completed in little more, or even less than, eight seconds. "If you roadrace," says Terry Vance, the man who actual-

ly rides the Top Fuel Suzuki, "you've got two miles to get speed, but in drag racing all your acceleration is crammed into 1300 feet. It'll straighten your arms right out." After a pause he adds, "It's deathly scary." Tuner Byron Hines agrees, and adds, "A Top Fuel bike is the top of the line—absolutely the fastest you can accelerate on a motorcycle. It takes a different breed to ride one."

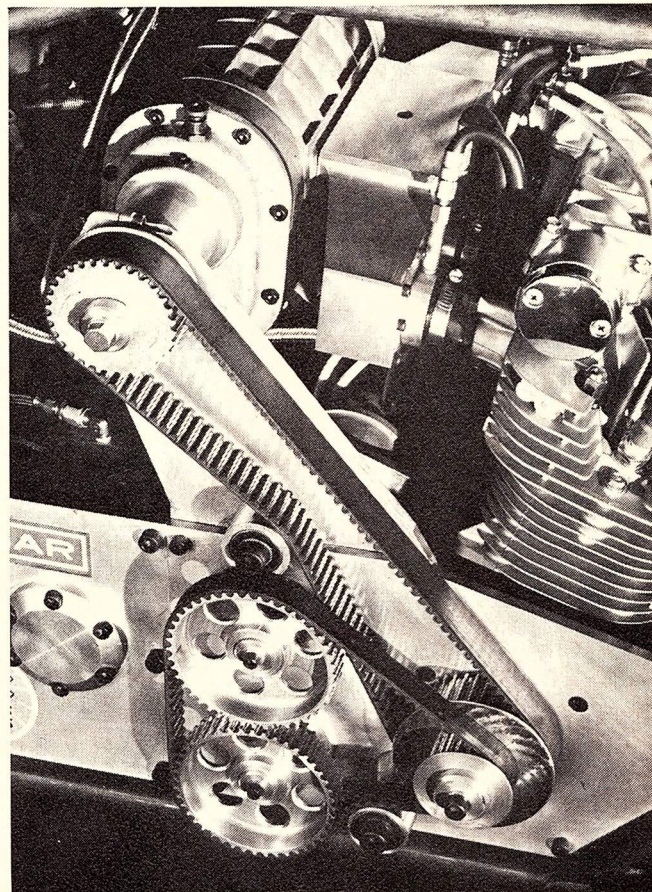
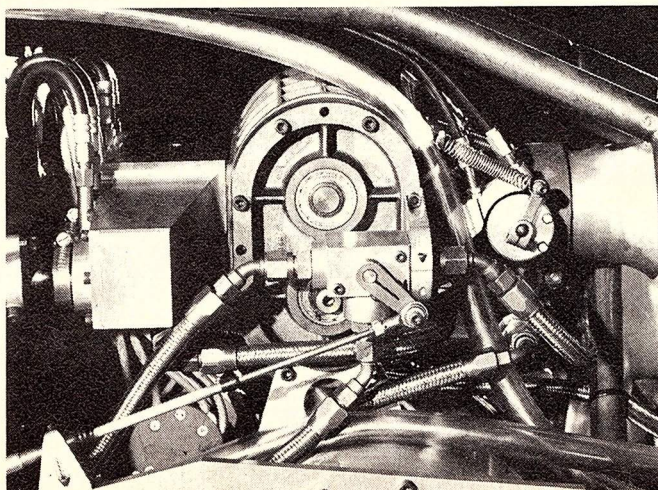
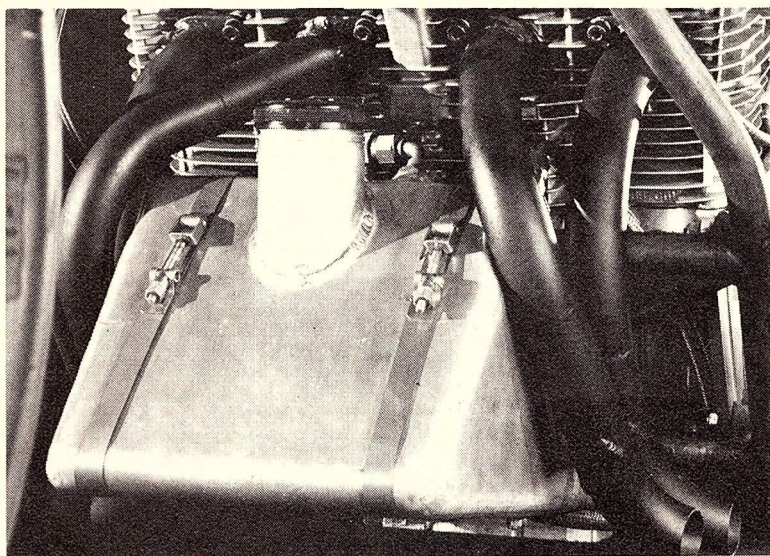
Why would anybody want to ride atop a device that will hurl him to a speed of almost 300 feet per second in just over 1300 feet? "It's not like being in a car or on a roadracer," says Terry. "It's an unparalleled experience. The speed thrills me to death. I like it."

"I've always wanted a Top Fuel bike since the first day I went to the track. I saw Boris Murray's double-engined Triumph when I was 17 and I couldn't believe it. When Suzuki decided they wanted a performance image and tied up with us, Top Fuel was the obvious goal. But they wanted the image to be apparent even looking at the bike."

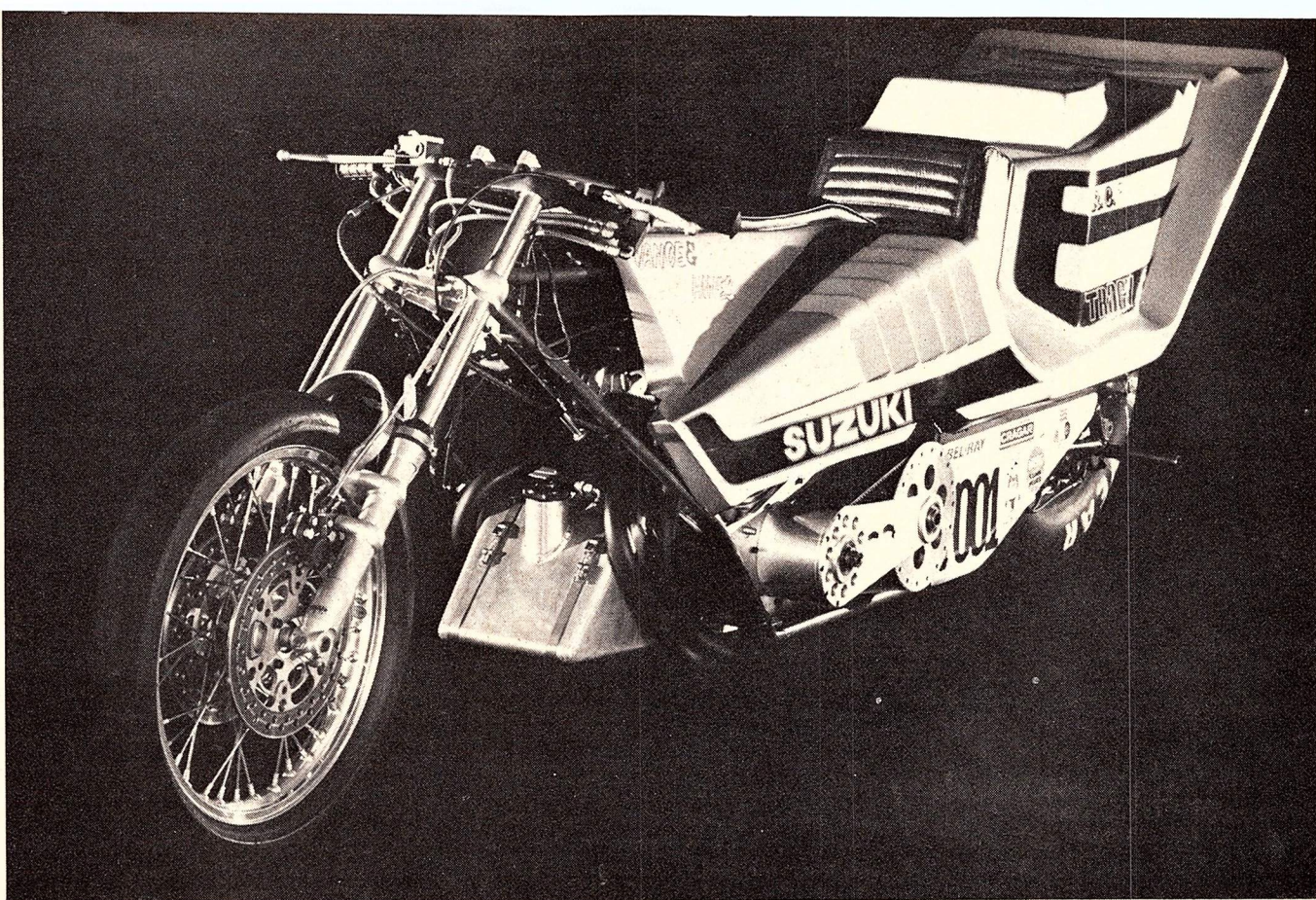
The Top Fuel Suzuki is the offspring of a mechanical menage a trois among R.C. Engineering tuner Byron Hines, Suzuki and Tracy Design. Byron Hines has possessed a name to conjure with in drag racing since the early Seventies

when he teamed with Russ Collins to build the fabled Atchison, Topeka & Santa Fe Top Fuel Honda triple, the first bike ever to break the eight-second barrier, and Terry Vance's B-Gas double-engined Honda, which won 22 of the 23 races it entered, making the Vance/Hines team the winningest ever. Later Byron built The Sorcerer, a blown V-8 Honda Top Fueler which Collins hopes to break the 200-mph barrier on.

To build the Suzuki ET-smasher Byron started with a Kosman Specialties frame and stuffed a 12-inch Goodyear slick on a fixed axle in the back, and slipped a 3.25-inch Goodyear slick into a Ceriani fork with two steering dampers and bolted it to the front. Then he took an unassuming GS1000 motor and sawed the cases off between the transmission main centerline and the crankshaft centerline, tossed away the stock transmission and installed a B & J two-speed gearbox working through a Crower Glide dry sintered-iron centrifugally operated clutch. Final drive is via an Azusa 520 double-row chain. An aluminum plate sealed the motor. Underneath, an aluminum oil pan with a screen was added to act as a sump for the oil pickup. An externally driven (off



The 88-percent nitro solution rests in an alloy tank (top left) nestled amidst the short exhaust pipes. This area will eventually be faired for speed and safety. Except for the double-520 final drive chain, all the driven pieces are connected by toothed belts (above). The head is stock but operates under much more pressure, thanks to a Magnuson supercharger and Hillborn fuel injection.



the end of the crankshaft) Aviad oil pump with an adapter for a constant flow fuel pump circulates 3½ quarts of Bel-Ray 20/50 through a Fram oil filter.

The oil is changed after every run to preclude galling. The fuel is an 88-percent nitro solution, which is strong enough that even the small amount that gets by the rings can cause serious problems. "On the fuel bikes we ran before, the Hondas," says Byron, "rocker arm and cam lobe wear greatly accelerated if you got a weak oil."

The built-up crankshaft is a 1979 example with solid center pins. "Some of the early crankpins were hollow," says Byron, who adds he was leery of running hollow pins in such a powerful motor. The connecting rods are hand-made from aluminum.

Keeping the stock stroke, Byron bored the block out to 73mm to give a total displacement of 1085cc—about 90cc smaller than the Vance/Hines Pro Stock Suzuki. The pistons are R.C. Engineering forged aluminum units with a compression ratio of 6.5:1. Each is hugged by two 1/32nd compression rings and a three-piece oil ring.

The cylinder head is, surprisingly, stock other than larger cylinder studs. "We'll keep the head stock," says Byron, "until everything gets reliable and Terry gets used to riding the bike." R. C. 400 cams and valve springs see that everything opens and closes as it should. A Vertex magneto connected to a Uniroyal belt-drive supplies juice to spark the NGK B10E plugs.

A Hillborn fuel injector with a Crower

three-way fuel shut-off meters fuel for the Magnuson Products Magnacharge 20 pounds psi blower which Byron runs with a 15 percent overdrive at about 15-pounds boost. The intake manifold was machined out of a solid block of aluminum alloy by Byron, mainly for ease of maintenance. The manifold plugs into the stock rubber and two bolts take off the blower.

The only speed parts in the bike that aren't for sale to the general public through R.C. are the crankshaft and rods. "The only reason we don't sell these," says Byron, "is that there is only one bike that can use them—ours. If there's a market for them, we'll sell them to the public."

Although on paper the bike may not seem like it was that complicated to build, Byron says he spent 400 hours—"at least"—in machine work and fashioning parts. In total it took almost eight months to get the bike ready for its debut at Indianapolis.

The body of the bike, the thing that attracts so much attention from the stands, was built by Tracy Design. The original purpose behind building the body, apart from making the Suzuki Top Fueler visually different from other Top Fuelers, was safety. "A nitro fire can be pretty bad," says Byron. "We wanted a fire—if we have one—contained inside the body. Second was looks and function."

Tracy Nelson of Tracy Design says he designed and built the body in two weeks. "What that thing is"—the body—"is an upside down airfoil: it keeps the

rear wheel on the ground and, the faster the bike goes, the more it keeps the front wheel down." Byron notes that with the body on, the bike "hooks up real well in midrange and top end. It's quite a bit of an advantage. The bike doesn't handle funny. We haven't had a lot of wheel spin. Russ Collins spins the tire on his V-8 bike all the way through the lights; he's wasting power. As we get more power we'll have more and more advantage." The four-inch spoiler on the back, which may grow higher as power increases, is obviously doing a good job of keeping the wheel and the power on the ground. "Keeping the tire on the ground is the most important thing," says Terry Vance. "A 12-inch tire grows up to about four inches (of contact patch)," because of centrifugal force when all the power of the motor suddenly spins the wheel. "There's a point when the tire patch would actually become zero and the bike would get airborne if we got enough power and there's nothing to hold the tire on the ground." That's what the spoiler is for. "Right now," adds Terry, "I'm having trouble wheelie-ing at the light." The addition of an air dam in front of the low and forward-mounted 2½-gallon fuel tank and a fairing may cure that problem.

Tracy has confidence aerodynamics will solve the traction problems the high-speed quarter-milers are beginning to experience. "A 747 leaves the ground at 185 mph. Motorcycles are designed to run on the ground. They don't fly worth crap. The tail spoiler

creates down pressure," forcing the tire to stay on the ground. "The louvers on the body," Tracy continues, "are to release air pressure so the body doesn't act like a huge air scoop."

"The reason things go slow is that they don't penetrate the wind and they create drag. The body streamlines the bike and cuts drag and in addition creates pressure to keep it on the ground. The front air dam the bike will have for next season extends a foot and a half on each side. It will spill wind around the bike and help keep the front down. Keeping the bike on the ground is the most important, but the more unstreamlined pieces you have the more disturbed air you create and the more drag you have to overcome. That's why I spent so much time studying aerodynamic engineering to get this thing right. The reverse airfoil effect should keep tire (contact patch) growth to only eight inches, instead of three or four." That will mean better traction, more useful power being transmitted to the ground, quicker ETs and faster terminal speeds.

The feature the body displays that most attracts pit browsers is the way it lifts up like a funnycar body. This was done to speed maintenance.

The body on the bike right now is more or less a prototype made of fiberglass laminate. It's not fireproof—although it should be able to contain a fire for a few critical seconds—and it conceals no "flak jacket" to stop shrapnel should the engine explode. It's also heavy, weighing between 20 and 40 pounds. Most of the weight comes from extra gusseting. "We really didn't

know how strong we should make it," says Byron. Next year the body will be made of Kevlar, "The same stuff bullet-proof vests are made of," points out Tracy. "It will have foam sandwich inserts to shield the rider from a blowup or burns and it will be fireproof."

Whatever the Vance/Hines team decides to do, it seems they will get full backing from Suzuki. Says Byron: "They're a company on the move, trying to make a mark, and they're doing a pretty good job of it."

At Indianapolis, where it was debuted and failed to qualify, and later at Ontario, where it won an award for Best Engineering, but pulled out with mechanical problems, Suzuki's effort at Top Fueling has been a fizzle. Does that worry anybody? "I rode the bike for the first time at Indianapolis and didn't know what I was doing," says Terry. But we had the power. We ran over 170 in the 8.60s. At Ontario I ran 8.04 at 180 and was the No. 4 qualifier in the field."

But then a wristpin let go. Terry believes it happened during the burnout. Byron believes it could have happened then or during the run when Terry was forced to back off the throttle. Backing off the throttle leans out the fuel mixture drastically and suddenly, which is bad news for any motor, let alone a heavily stressed unit running on nitro. Whenever it happened, a wristpin cracked and caused the rod to wobble, and, Byron says, "We decided not to run it again. We could have broken the rod and sawed the motor in half."

Byron is not disappointed by the mechanical failure, Terry's inexperience on

the bike, or the unimpressive (relatively speaking) times the bike has run. "Things break. You fix them. Terry's getting acclimated to the speed. He runs 140-147 on the Pro Stock bike and 180 on this one. There's quite a difference in acceleration. Eventually, on a real good track, we've got 7.60 potential, in the 190-mph range, maybe better. Approaching 200 mph might not be too far out within a year. But it would have to be a really exceptional track."

Talking about the fact you can't steer a Top Fuel bike with the front wheel, but must use body english, Byron says, "The bike is balanced really well—that's the main thing—it'll balance by itself in the pits without a stand. Before we built it we mocked everything up, set it up on a 2x4. It's a little bit left heavy, not enough to affect balance. But with these real wide tires you don't need it drifting off to the left. The tire side walls are so flimsy, if the bike starts to go one way, you have to hang nearly off the other side. The bike basically wants to go straight, but how the horsepower comes on, how the clutch comes in, the launch: if the bike leaves the line straight it will go right through the lights straight. Mainly it's Terry getting used to it."

Terry agrees. "There are only five people in the U.S. running Top Fuelers who know what they're doing—and I'm not one of them. But I have the potential... I had no idea it would be like it was. The power is devastating, the acceleration phenomenal. The first 600 feet is what it's all about. You're accelerating so hard without being sure where you're going.

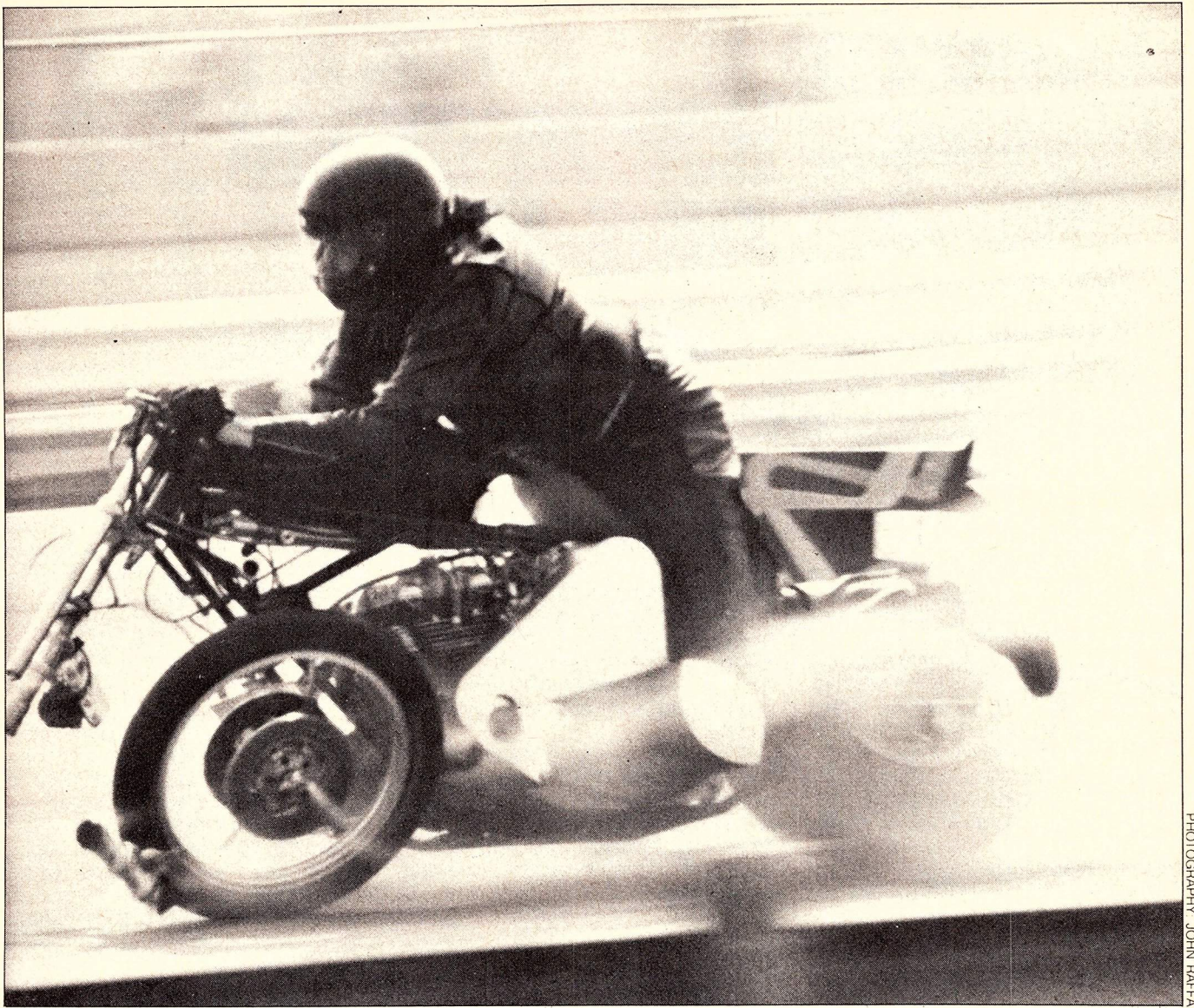
"I have a tremendous amount of respect for the bike," continues Terry, "It scares the crap out of me. I'm just not accustomed to it. I've been involved in drag racing since guys were running four-inch tires, but this is something else. Once I understand the bike and learn to make it go straight we should really drop the times.

"With 12 inches of rubber in the rear you can turn the handlebars and the front tire just skids. You have to use body english. The bike is accelerating so hard and vibrating so much that you can barely see... If you've ever gone down a roller coaster real fast—a rickety one—you'll have an idea of what it's like. You guide the bike by the center line and guardrail. There could be somebody standing in the middle of the track and you couldn't see him. You're aware of what's going on at the sides... It's like driving a car in the rain with no windshield wipers, you steer by what you can see to the sides. If you're going down the track and you're pointed just a little bit crooked when you turn the throttle on you'll have to correct with your body within 50 or 60 feet of the starting line.

continued on page 81

Rider Terry Vance and super-tuner Byron Hines smile after receiving the Best Engineering award at Ontario. Things can only get better. With more streamlining, more power and more practice, the top-fuel battlestar is certain to get faster. Vance, four-time king of pro-stock, claims he hasn't even figured out how to ride this low-flying rocket yet. Will they be first to 200 mph?





PHOTOGRAPHY JOHN RAFFA

Ernie Rife's Top Fueler loses its front end at Indy. The bike veered and hit a guardrail at 150 mph. Was this tragedy avoidable?

A LESSON TO BE LEARNED

Drag racing is a dangerous business. Deadly dangerous. Only recently a dragger died at the NHRA National Drags at Indianapolis. Ernie Rife was killed when, just after passing through the lights at 180.36 mph, his Kawasaki went into a wobble so fierce that, as you see in this dramatic photo, the front wheel broke completely off the machine. Why the fatal accident occurred is still being investigated, but it is reported Rife had hit a chuckhole at a race the week before Indy just after he crossed the finish line, and that as a result the front fork was leaking oil and may have been cracked when he wheeled his bike to the line.

Others knowledgeable in drag racing point out that Rife's bike was not made for Top Fuel. The center of gravity was too high and it wheeled

easily. According to witnesses, Rife left the starting line at Indy with the front wheel in the air. It was still in the air when he shifted into second gear and in fact he wheelied right through the lights. When he shut off the throttle the front wheel finally came down, but it was not in alignment with the rear tire, which as a result rocked onto one edge and smoked as traction momentarily dropped. That shook the bike into a wobble too strong for the Ceriani fork, damaged or otherwise, to safely handle.

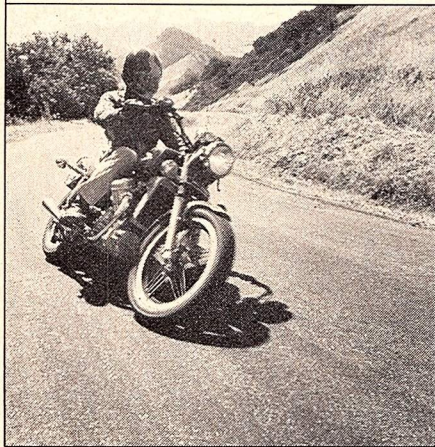
When it snapped Rife tried to ride the bike to a stop on the fork tubes, using the throttle to steer his out-of-control mount to safety through a gap in the guardrails. The attempt failed and he hit the guardrail.

It was a grim reminder for all con-

nected with drag racing to double-check maintenance religiously and replace any part even suspected of being faulty. It was also a reminder to tyros to stay clear of Top Fuel bikes until they really know what they are doing. As one rider said, "Top Fuel bikes are extremely dangerous. If you can't handle them, stay away from them."

At *Motorcyclist* we found ourselves staring at this incredible photo with an almost spiritual awe, saddened by its portent, sobered by its implications for everyone who rides. The message in this haunting photo is clear, and universal. Don't take the mechanical condition of your motorcycle for granted. And don't tempt fate by taking unnecessary risks. Our sport, wonderful as it is, has limits. Stay within them and stay alive. **M**

HowTo



HONDA CX500 TUNE-UP

**It only takes 30 minutes
to keep it running crisp**

By Joe Minton

Honda's technically advanced CX500 has developed a cult-like following of owners drawn to its performance, smoothness, comfort and simplified maintenance. Its water-cooled pushrod twin-cylinder engine churns out more power over a broader range than the fabled Norton Manx. Low frequency vibration and an adequate seat do not irritate or fatigue over the "long haul." And its ComStar wheels, electronically triggered ignition, shaft drive and readily accessible valve adjusters reduce maintenance to an easily accomplished minimum.

After the 600-mile break-in service, Honda recommends that major services be accomplished at 7500-mile intervals. Gear oil, shaft grease, carburetors and such can easily wait 7500 miles for attention. However, for best performance, quiet operation and longest engine life: the valves and cam chain tensioner will need more frequent adjustment. And the spark plugs, oil and oil filter should be replaced more often. Tight valves reduce responsiveness and performance. Loose valves and a loose cam chain make noise. If the oil and filter are replaced at 2000-mile intervals, the engine will remain as clean inside as the day it first ran. Spark plugs, although they will function for 7500 miles, affect smoothness and

throttle response as they wear. To keep that "just tuned" feel, replace the plugs every 2-3000 miles. It should make a noticeable difference.

Using the CX500's tool kit, a feeler-gauge set and a 10mm box-end wrench, the owner can change oil, oil filter, spark plugs and adjust the valves and cam chain easily and quickly.

These step-by-step instructions will seem more complicated than they really are. Once you have done a "minor tune-up," it will be very easy to do again, especially after you experience the pride of having done the job yourself.

the spring seat washer is not thrown away with the filter. It will stick to the filter so be careful. Wipe the filter housing interior with a clean cloth or wash in clean solvent.

Photo 3

Install a new filter and O-ring. Be sure the spring and spring washer are in place. Wipe the engine with a cloth. Screw the filter housing onto the engine case and tighten (16 foot pounds). Replace the drain bolt and tighten (17 foot pounds). If you have access to a torque wrench, use it. Most professional mechanics do not use a torque wrench on these bolts and have little trouble. Over-tightening is far more likely to occur than is under-tightening.

Photo 4

Using a funnel or oil filler spout, pour in two quarts of top grade 10W-40 motor oil. Start the engine and run it for about a minute. Stop the engine, let it set for a couple of minutes and then top the oil up to the full mark on the dipstick.

Photo 5

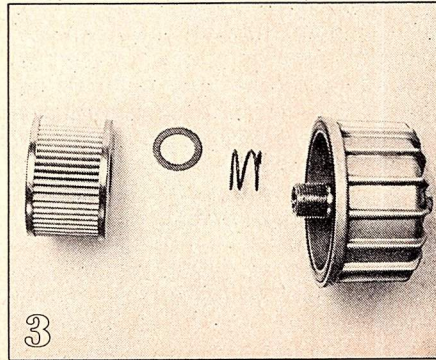
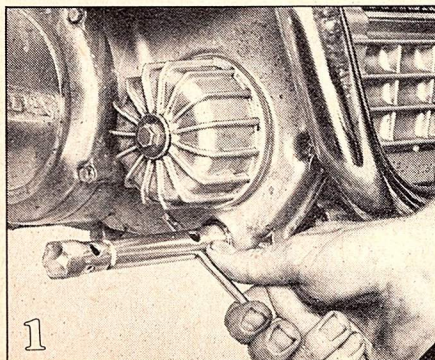
Valve and cam chain adjustments: Remove the spark plugs. Remove the valve covers. Remove the timing mark cap located on the rear engine case below the right-hand carbure-

Photo 1

To change the oil and oil filter: Ride the motorcycle until the oil is warm so particulate matter becomes suspended and flows out with the oil. Place the motorcycle on the main stand and center a catch pan under the oil drain bolt. This pan should have a capacity of four quarts or more. Remove the oil drain bolt being sure that the drain bolt sealing washer is also removed.

Photo 2

Loosen the oil filter bolt and remove the filter housing. Discard the used filter and O-ring. NOTE: Be sure that



tor. Put the gearbox on top gear by rocking the rear wheel with one hand while shifting the gear selector lever up with the other.

Photo 6

While watching the right-hand intake valves, rotate the engine by rocking the rear wheel in the forward direction. The intake valves will be seen to move down (open) and then up (close). As soon as the intake valves close, look in the timing hole at the flywheel. Continue to rotate the engine until the "TR" mark on the flywheel is centered on the hole. The right-hand valves (both intake and exhaust) are now ready to adjust. NOTE: If the valves are very tight when the "TR" mark is visible, continue to rotate the engine and try again.

Photo 7

Insert a .08mm (.003 inch) feeler gauge between the valve tip and the valve lash adjusting screw. When the gauge is moved through this gap, a slight drag should be felt. If the gauge moves freely or will not go into the gap, re-adjust the gap by loosening the tappet screw lock nut, adjusting the tappet screw and re-torquing the lock nut (12 foot pounds). Adjust the exhaust valves in the same way using a .10mm (.004 inch) feeler gauge. NOTE: Do not over-torque the lock nuts. Now rotate the engine just until the "TL" mark is centered in the timing hole and adjust the left-hand valves.

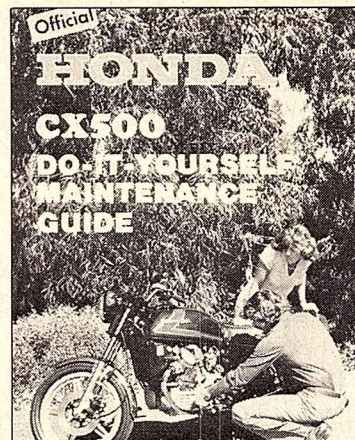
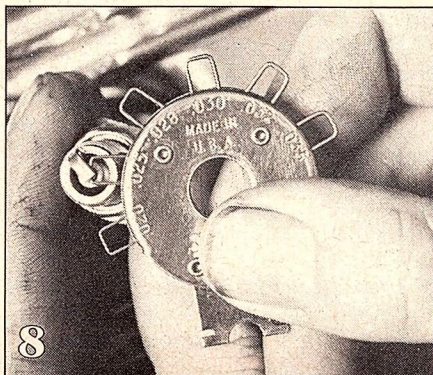
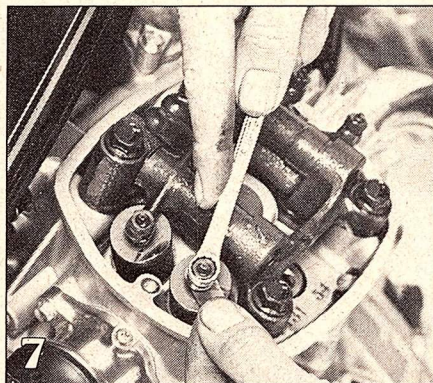
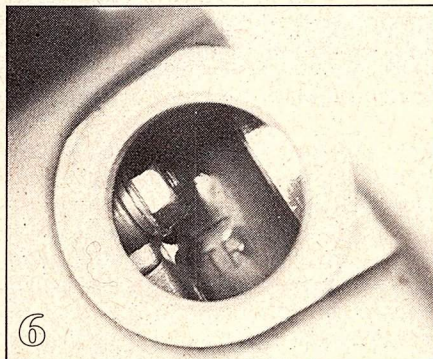
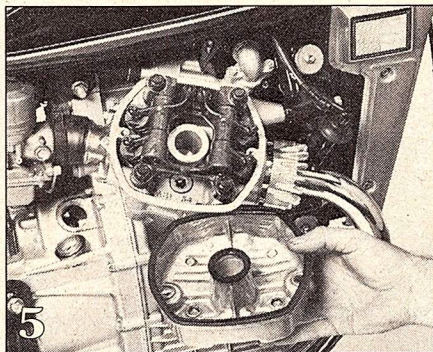
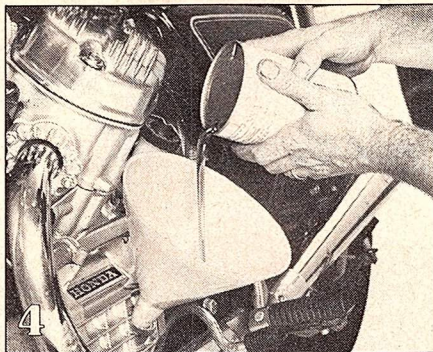
At this time adjust the cam-chain tensioner by loosening the cam-chain tensioner lock bolt about one turn and gently re-tightening it. The tensioner will adjust itself automatically when this procedure is followed.

Photo 8

Spark plugs: Using a feeler gauge, adjust the spark plug gap to .6-.7mm (.024-.028 inches). Usually new spark plugs will be correctly adjusted and will not need adjustment. Screw the plugs into the cylinder heads and tighten them 1/4-1/2 turn after the sealing washer contacts the head (1/8 turn for used plugs).

Final Inspection

After completing these steps, take a general look at your motorcycle. Does the brake light work? Do all the lights work? How about tire pressures? Do you know if the battery has enough water? What about the oil level in the shaft-drive rear end? Learn to recognize the need for attention to the various service points on your CX500. By giving proper maintenance, you won't have to wait for something to go wrong. You will know that everything is right.



Honda's Do-It-Yourself Maintenance Guide

Motorcycles cost more. Parts cost more. Service costs more. Money is worth less. Sometimes rightly, sometimes wrongly, motorcycle owners have no confidence in their dealer's service department. Signs of the times. What does one do? One does it one's self!

Perfectly timed to coincide with the resurgence of the do-it-yourselfer, American Honda Motor Co. has released a series of maintenance manuals for specific, contemporary, models in their street bike line. We have chosen the "CX500 Do-It-Yourself Maintenance Guide" as an example for this review. The \$7.95 book is soft bound and measures 8½x5½ inches.

Written for "those of you who: have a strong interest in saving money—have mechanical skills and take pride in the care you give your motorcycle," this book succeeds at its chosen task admirably.

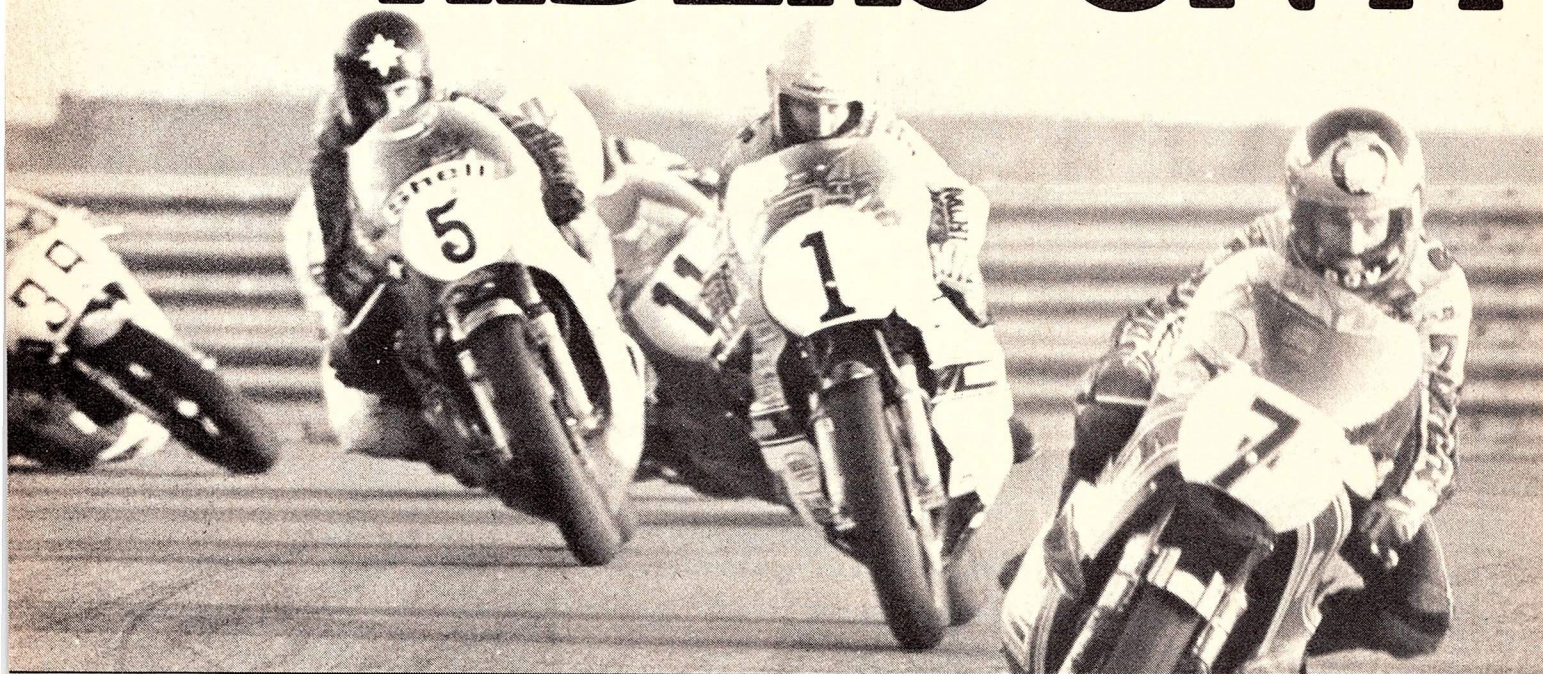
The manual is divided into ten sections dealing with subjects like: tune-up, lubrication, brakes, trouble-shooting and storage. There is an excellent introduction that encourages but cautions the reader to pay close attention to the instructions in each section. Numerous safety related warnings are included in the front of the book and, where appropriate, throughout the manual.

A well-illustrated tool list specifies those needed (outside the bike's tool kit) to complete any task covered by the manual. This tool list is not extensive and its purchase price should approximate the cost of one tune-up at a Honda dealer.

The excellent photographs used to illustrate this manual are supplemented by many simple and clear drawings that often are more useful than photographs. Safety warnings are accompanied by humorous cartoons that simply state the danger, for instance, of running a motorcycle in a closed space. Each maintenance task is presented clearly and simply and will not confuse or insult anyone who might read it.

"Do-It-Yourself Maintenance Guide" is so well written and encouraging that it is fun to read. Any moderately skilled CX500 owner would do well to purchase one of these manuals from his local Honda dealer.

RIDERS ON A



Sheene (7) and Roberts (1) spearheaded the rider revolt which led to the new World Series.

Out of touch with reality. Old fashioned. Tyrannical. They make up the rules to suit themselves." These are just some of the comments that have been directed at the ruling body of motorcycle sport, the Federation Internationale Motocycliste, in recent months by a group of top road racing stars. Now this same group of 40 riders has announced plans to boycott the established Grand Prix scene in the coming season and hold their own world series of races to be known as the Formula One 500 series.

Leading this group of breakaway riders are Barry Sheene and Kenny Roberts, both double World Champions. In an exclusive interview at a race in England, Kenny Roberts talked to *Motorcyclist* about the form this series will take and the reasons behind the move.

MC Kenny, it seems to have been a very sudden decision by the riders to quit Grand Prix racing.

KR Well, let's get the facts right. This whole idea has been discussed by us for a long time now, so it's no way a sudden decision.

MC This has been tried before though hasn't it? Riders have boycotted races and it has had no effect. What makes you think that this will be any different?

KR Sure other riders have boycotted races before but that's not what we're talking about now. What we're doing is not just going to a Grand

Prix and then not riding, we are setting up a series of races totally outside the GP scene. It does no one any good to refuse to ride in a GP if they're involved in the World Championship. The sponsors get upset because they're putting a lot of their own money into a rider's challenge and they expect to see him get out there and ride to win. The public pay their money to see you race. Don't forget that in a way it's the public who pays your wages and they get upset if their heroes don't get out there and put on a good show. Well, what's going to happen is that the FIM will hold their Grands Prix and we'll hold our own series as a separate championship.

MC You seem convinced that the FIM will allow you to go ahead with the idea.

KR So what are they going to do? Refuse to sanction our races? Because that's all the FIM is, a sanctioning body and if they don't sanction the races then they're not doing their job. For over 70 years now they've been doing things for "the good of the sport." Well that's all we want to do, improve the sport by expanding it.

MC That's all very well but each track has to have an individual license granted for each day's racing and all the licencing bodies such as the AMA and the ACU may well refuse to grant a license to race because you are outside their normal

scope. How are you going to get around that?

KR You're talking now about any governing body from a country refusing to grant a track license to a track that runs one of our races. We would have that authority in court so fast it just wouldn't be true. What are they going to say? We won't give them a license because the riders are going to make money out of it? Can you imagine any court decision going against us after evidence like that? After all that's what we intend, that the riders will actually make some money from their racing.

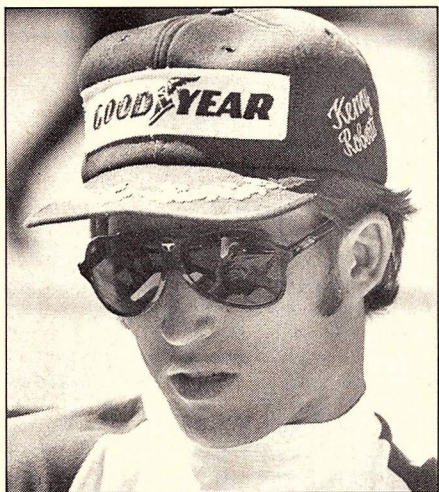
MC We know that just one GP machine costs over \$16,000 and for a serious attempt at the world crown a rider needs at least two machines. But surely the fact that you are racing in a World Championship event means that that sort of money is covered. They pay appearance money at GP races don't they?

KR That's where you hit it. To go to races in Finland or Sweden or Spain costs a whole lot of money. You have to ship out the machines, the mechanics, your sponsors may want to travel there, the machine could well hit a problem, although we've had very few problems with the Yamaahas this year. It all costs money and the sort of money that's offered just doesn't meet the expense. You really do lose money by racing at these tracks. The final straw for me was in Spain this year. You should

LIMB

By D.J.K. Wilkinson

never have an official on the ruling body who is also a promoter for a race. The promoter is in there to make money and when it's his country that's holding the GP, then it's a mistake. There's no way that anyone who stands to make money out of a race should have a say in the rules or start money of that race. I went to Spain as the reigning 500cc World Champion and they tried to short change me... they tried to tell me that they couldn't pay me the minimum amount laid down under the FIM rules. As far as they were concerned I was defending my championship and had to ride. OK, I won the race and showed them, but there was no way I would accept the lau-

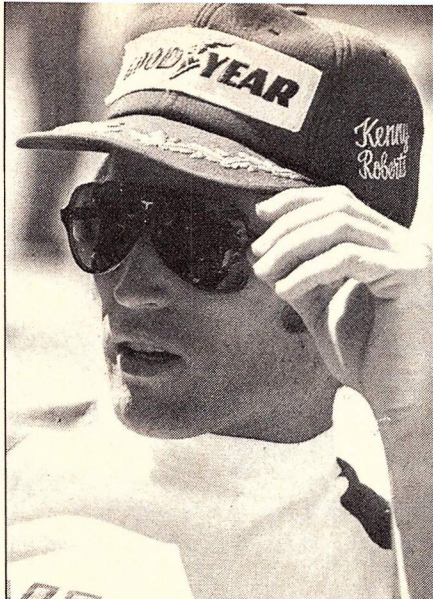


If they couldn't afford to pay me to race there then they needed the prize money more than I did.

rels or the prize. If they couldn't afford to pay me to race there then they needed the prize money more than I did.

MC How does Yamaha feel about your pulling out of the Grands Prix?

KR I've spoken to Yamaha via the European distributor in Holland and they seem to understand that I'm not trying to end Grand Prix racing but extend the sport. It needs doing for motorcycle racing's own sake, and there has to be a challenge, something for the riders to aim for. That's what we intend to supply, a new challenge with the absolute best riders competing against each other on



safe tracks and under the best conditions.

MC You intend to provide the racing, but there are only 40 of you. How are you going to match the thrills and excitement of the present Grand Prix races? Surely it would be a case of the same riders appearing again and again?

KR To an extent yes, but don't forget that those riders will be the best in the world.

MC But does this mean that for any rider to race in your events he will have to have been one of the original group that rebelled? How else is Joe Smith going to get his chance?

KR Each country will be represented and it will have a committee of selection chaired by that country's top rider. For instance there will be Barry Sheene in England, Willie Hartog in Holland, me in America and so on. There will be 25 places set for named riders and we will invite perhaps ten others to contest the race—with no guarantee of start money but a chance at the prize money. From those ten riders we will have five qualifiers who will actually race and every finisher will have enough in prize money to make it worth it.

MC So what class of racing do you intend to hold?

KR For a start we'll have just 500cc and 250cc racing, but you can bet that if our promoter comes along and says "Hey, I want 125cc racing as well," then we can have 125 racing in a matter of weeks, not like the FIM, which would take years to arrange it. If we want 125 racing we'll just get on the phone and ask the guys to race for us there and then. That's the beauty of racing arranged by the riders. We know the people throughout the sport and we can talk to them and arrange the races because we're riders too.

MC How far have you actually got with your plans? It sounds as though

Kenny Roberts talks about the world's top roadracers splitting from the FIM and promoting their own Series

you have it all worked out.

KR We have. I told you that it was no quick decision. We've been going into this for months and so far we've got a major sponsor lined up to promote the idea for at least two years, we've got the television rights organized, and that's a big plus for any factory or sponsor—better TV coverage of the world's most exciting sport, and we're ready to sign contracts with various tracks around the world to hold our races.

MC Which tracks will you be using?

KR I can't let you know that just now, but we have the tracks lined up.

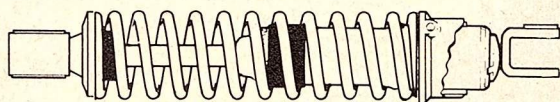
MC There will surely be certain tracks or countries that you plan to avoid racing, bearing in mind the problems we've heard so much about—for instance safety?

KR There are certain tracks we wouldn't consider at the present time, not just for safety reasons but for a whole variety of reasons. We won't be racing in Spain, Sweden or Finland, for instance, and there are other countries we won't be at as well. There's a vast difference between a track like Donington Park in England where the owner goes out of his way to ensure that each rider is happy and comes around to talk to you as an individual, where you have the best safety precautions in the country, clean showers and toilet fa-

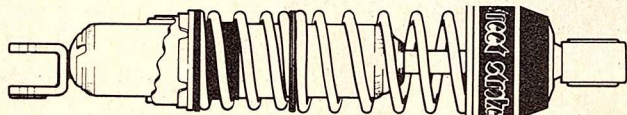


Each country will be represented. Every finisher will have enough in prize money to make it all worthwhile.

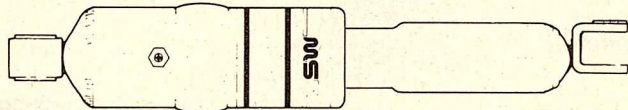
DECISIONS



HYDRAULIC STANDARD D-20 G



STREET STROKER FREON SS-5 (AVAILABLE DEC. 1979)



AIR ADJUSTABLE MARK III AT-20

3 Great shocks for 3 great Honda super bikes!

| MODEL | SHOCK | RECOMMENDED SPRINGS | AIR BOOST FORK KIT | FORK SPRING |
|----------------|--------------------------|--------------------------|--------------------|-------------|
| CBX 78"-79" | D-20G SS - 5 AT-20 | *SP 9525-9 *DT 85-145 | 62-12-134 | ----- |
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* SPRING RECOMMENDATIONS FOR SOLO RIDERS (140 TO 170 LBS) ALL SHOCKS AND SPRINGS AVAILABLE IN CHROME

RIDERS ON A LIMB

cilities and some of the Grand Prix tracks where the facilities are so rough you just wouldn't believe it and they treat the riders as some sort of nuisance.

MC How many races do you intend to run in the Series?

KR We will be running ten races.

MC Does this mean that the fans won't see the top motorcycle road-racers unless they go to one of your races?

KR No, it just means that they won't see us at any Grand Prix events, but we will be racing at other meets.

In the next few weeks riders representatives will be traveling to Japan to discuss the Series with various factories, but already Honda has announced that their riders are contracted to ride the Grand Prix. Whether there will be a change of attitude by Honda or whether they will allow their riders to contest Series racing when the two events don't clash remains to be seen. Other interested companies such as the tire people and oil companies have already given their OK to the Series and Bernie Ecclestone of the Formula One Constructors Association has been helping the riders with advice as how to best approach track owners. The Series is definitely a go.

Editor's note:

It appears that the riders expect to generate immense prize monies (enough for many of them to make a profit via racing) by promoting the events themselves, thereby eliminating promoters and channeling those profits into a purse which pays down to 30 places. But the races will still require huge expenditures for advertising, promotion, logistics, press facilities, ticket printing, insurance, etc., whether Cyril Muchprofit promotes it or a rider group promotes it. The Series' success depends entirely on one factor—money. The riders won't compete if they aren't making it. The track owners won't cooperate if they aren't making it. So attendance will have to be big enough to generate buckets and buckets of money.

But what if Kenny or Barry gets hurt? What if two or three events are runaways or get rained out? What if TV ratings fall flat or spectators can't afford the admission? In these cases the sponsor will have to be rich enough to make up any deficit with no regard to his budget. As we see it, the only sponsors that could handle such a guarantee would be oil, alcohol or tobacco companies. Kenny hasn't yet announced the major sponsor, but if it isn't one of these, we're not sure that the World Series can work. The riders are most certainly on a limb, taking financial risks equal to the ones they take on the track. We've got faith in racing and faith in Kenny, but until we know who's underwriting the cash flow, we won't predict the fate of the Series.

But we're totally sure of one thing. If there's a U.S. round, we'll be there.

—Dale Boller

SONIC INTERCOM: The Sound Investment

Sonic Intercom lets rider and passenger converse without shouting or taking their eyes off the road. The control box also can feed music from a radio or cassette into the earphones without affecting microphones so users may talk over

news or music. Individual volume controls let each set sound level wherever they like it. Normal traffic noise, buzzers, engine still are audible. Earphones and mike merely press on any brushed nylon helmet lining.



- Listen to and talk over your radio or cassette at any road speed
- Self-powered by standard 9-V battery
- 100% plug-in installation and use
- World-wide reputation for quality
- Unaffected by heat, cold or water
- No-quibble, 12-month guarantee
- Webco exclusive U.S. distributor

Subminiature transducer microphone (1) fits into any type of helmet as shown. Flexible extension tube in open-face helmet eliminates wind noise yet catches the softest conversation without distortion or feedback. Stereo-effect earphones (2) require no helmet modification to fit. Pull-apart plugs (3) link helmet systems and control box for absolute safety. Cast alloy control box (4), the "brains" of the Sonic Intercom system, houses the subminiature printed electronic circuitry, individual volume controls and long-life PP3 9-volt battery (supplied).



WEBCO
MOTORCYCLE ACCESSORIES
BOX 429 • VENICE, CALIF. 90291

No compromise
Winston Lights didn't compromise
on great taste to get low tar.
Why should I?

Winston Lights taste good
like a light cigarette should.



Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

13 mg. "tar", 0.9 mg. nicotine av. per cigarette, FTC Report MAY '78.

Behind every World Champion.

True. Suzuki has won every 125 World Championship in motocross.

Some record, huh?

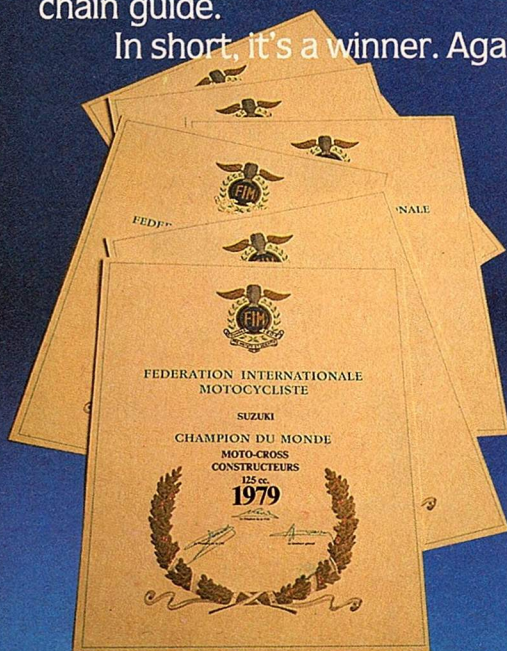
With that kind of breeding, it's no wonder the RM-125 is king of its class.

This year, it comes with the most finely tuned suspension this side of works. New oil refillable gas/oil shocks have four damping adjustments. Non-flex swingarm is extruded aluminum. And the front air forks offer nearly a foot of travel.

Powerband is wider and stronger, too. Thanks to a host of subtle refinements.

Also trick: Full floating rear brake is now operated with a straight cable for better braking control. And this year's bigger chain now rolls through a new works roller-type chain guide.

In short, it's a winner. Again.



SUZUKI  **1980**
The Performer.

Ride with care. Always wear a helmet and protective apparel. Ride only where authorized and respect the environment.

RM-125 is every 125



Member Motorcycle Safety Foundation





CAN-AM

400 MOTOCROSS

Another sensational Rotax engine nearly breaks the dynamometer!

We rolled the Can-Am 400 MX-6 into Webco's dyno room and bolted it in place. The bike wore the dirt and dings of four days worth of test riding. Fluids leaked from the carb, gas cap and fork seals. The bike looked like a mess. We fired the Can-Am up, then walked out, closing the soundproof door behind us. Through the window in front of the control panel we could see the big orange motocrosser shudder and shake. Chunks of mud vibrated loose and fell to the floor. The blue haze jetting out of the machine's silencer sliced through a corner of the orange rear fender like a blowtorch.

The dyno's indicator needle swung way over. The farther it went, the bigger our eyes got and the weaker other open-class bikes became in comparison to the MX-6. The Can-Am's motor didn't merely better the big-borers—it humiliated them. It peaks out at 38.6 horsepower—a figure which no current motocrosser can match. Over the years we've all come to expect spectacularly high peak horsepower from Can-Ams. The 400 MX-6 delivers. But what *really* amazed us was the bike's consistently high output throughout the powerband. It out-pulls the competition through the midrange by a huge margin. Even bikes that can almost equal the Can-Am's peak are, by comparison, hopelessly down on power at mid revs. The KTM 420

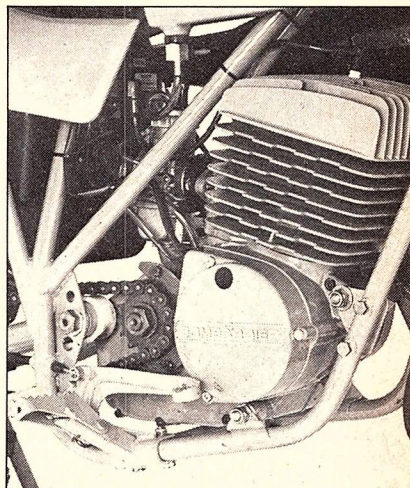
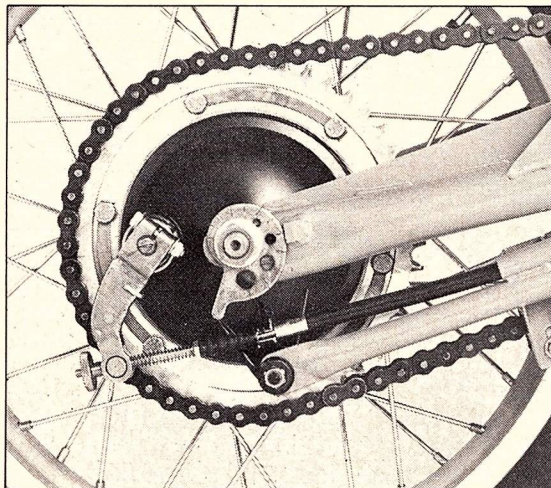
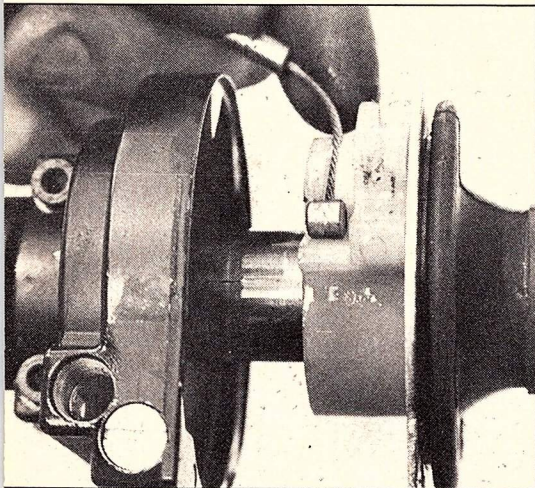
MC-80, for instance, makes 37.68 horsepower at its 7000-rpm peak. That's less than one horse shy of the MX-6's 38.6 maximum at 6500 rpm. But when both mills are spinning at 6000 rpm, the Canadian bike simply outclasses the Austrian machine with a six hp and five foot-pound torque advantage. That's a huge difference. All the other open-class bikes are about as far behind at this rpm. And if you pull the Can-Am down to 4500 rpm, the bike's advantage is just as pronounced. At this speed the peaky Yamaha YZ400 is giving away nine hp and ten foot-pounds of torque to the Can-Am. Think about it. At this speed the KTM is much closer, but not close enough. It's short 2.5 hp and 3.5 foot pounds of torque.

Rotax is the Austrian company that builds the motors in Can-Am motorcycles. What they can do with two-stroke single-cylinder engines is sheer genius. Even with their vast technical and monetary resources, the Japanese are unable to produce results like the 400 MX engine. Rotax could give *everyone* a lesson in two-stroke design.

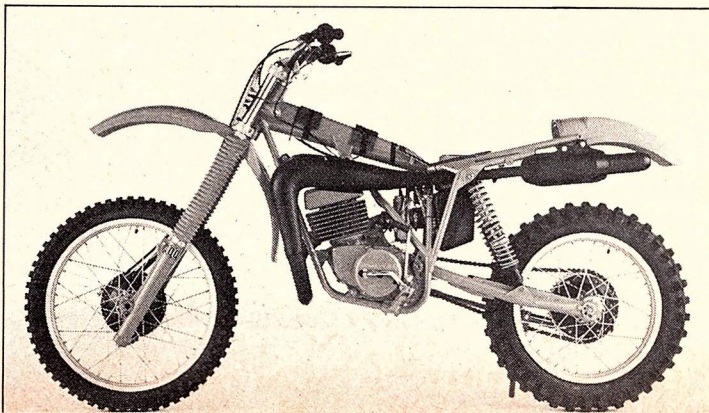
It hasn't always been this way. Though Can-Am powerplants have invariably made great heaps of power, they haven't always had the very best powerbands. Other engines that were down on peak power in comparison were often able to keep up on the track due to their stronger midrange power and more easy-

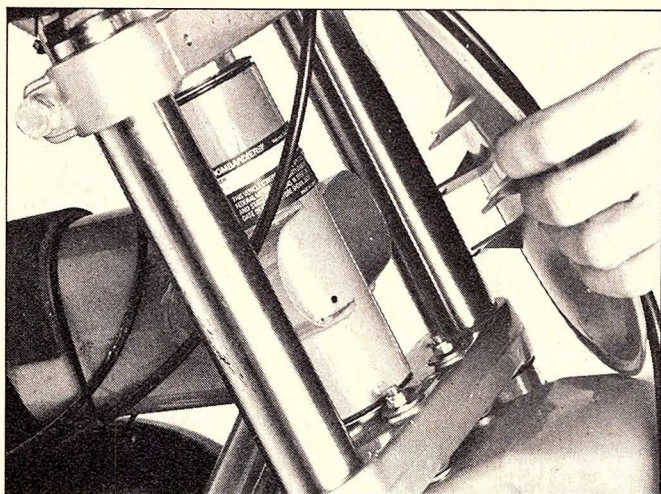
going nature. This is one Can-Am that suffers from no powerband shortcomings. The MX-6 is both powerful and predictable. A good deal of the motor's agreeable character came with an increase in displacement for 1980, up from 366cc to 399cc. The Rotax engineers didn't take the quick-and-dirty route. Instead of simply increasing the cylinder bore to pick up added displacement, they lengthened the stroke six mm to 72mm. The bore remains the same at 84mm. The new long-stroke crank provides greater flywheel inertia to further civilize the Can-Am's power delivery. The cylinder and head are new also to accommodate the longer stroke. Unlike certain other Can-Ams, the 400 doesn't use rotary-valve induction. It features the same combination piston-port/case-reed system found in Suzuki RMs. Last year's Bing carb is gone in favor of a 38mm Mikuni, which inhales through a new air box. The pipe and muffler are different this time around also.

This year the 400 will share transmission parts with its enduro cousin, the 400 Qualifier, so the motocrosser has wider ratios than in the past. Compared to the MX-5, the MX-6 has a lower first gear and a higher fifth gear. The bigger jumps between cogs pose no problem for the ultra-torquey Can-Am. In fact, the bike could easily pull taller gearing. As delivered, first and second are almost never used, even for starts. On fast

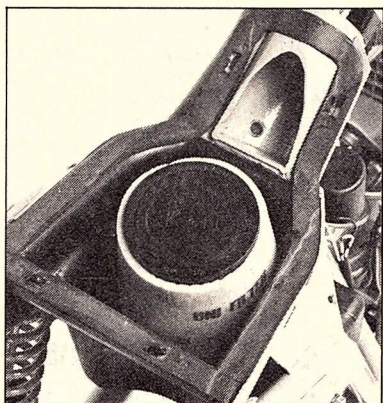


New throttle arrangement (above) gives you choice of $\frac{1}{8}$ - or $\frac{1}{4}$ -turn cams. Cable can be removed without disassembly. Cable operated brake (above center) now shares right side with the sprocket to eliminate heavier old-style crossover linkage. Frame (right) remains relatively unchanged from last year's 370 motocrosser. New muffler is same as Qualifier without spark arrester. The 399cc Austrian-bred Rotax powerplant (far right) is the mightiest open-class motocrosser ever offered yet for public consumption.





Hidden air-scoops (above) pass air through the frame to the sealed airbox (right). The system effectively keeps out most dirt, but requires removal of the seat (secured by six aircraft-type bolts) to service the K&N filter.



tracks fifth might not provide enough top speed. The shifting action itself is quite acceptable. Except for an occasional reluctance to upshift to second, the tranny shifts positively without the clutch, provided the rider backs off on the gas slightly. Full-power speedshifts with the clutch are no problem either.

When the first MX-6 prototype engines arrived at the Bombardier factory in Canada and were run on the dyno, there was undoubtedly a lot of back-slapping and champagne pouring. After all, their buddies in Austria had sent them what is probably the best open-class engine in recorded history. Once the merriment subsided, the frame and suspension guys set about building a chassis that could put all the horsepower to use. They started by ordering up a new batch of Marzocchi leading-axle forks—these with softer springing and damping and equipped with air caps. They lightened the rear wheel assembly by putting both the rear sprocket and brake drum on the right side. This eliminated the heavy crossover brake linkage used in the past and gave them a handy place on the brake stay to mount the plastic-lined chain guide. And to take care of rear suspension duties the old Girlings were shelved in favor of American-made S & Ws. For the really serious riders, the Can-Am people decided to

offer Ohlins reservoir-equipped gas shocks as an option. (For \$160 at the time of purchase, you can slide yourself into a pair of the very best shocks available). As final touches they lopped off the frame's seat loop, came up with a new lower seat and a set of FIM-approved rectangular numberplate sidepanels.

If the sport we all loved so much was called Dynocross, the Can-Am 400 would be the undisputed King. But the sport is called motocross, and a real motocross track requires more of a motorcycle than just engine virtuosity. This fact is what keeps the big orange Kanook-O-Krosser from just plain running away from the other open-classes.

Traction, or lack thereof, is the great equalizer. You can only pump so much power through the average knobby and into the ground. The rest gets wasted in wheelspin. The Can-Am is fitted with very average Dunlop knobbies. For example: we drag raced the MX-6 against a Husqvarna 390CR on a smooth powdery starting area, and the Can-Am would just barely pull the 390. The dynamometer says that the Can-Am should absolutely thump the Husky, but in the dirt, it's merely equal. The Husky gets help from its big 17-inch Trelleborg rear tire. It would be interesting to see how the MX-6 fared if it was fitted with a monstrous 17-inch

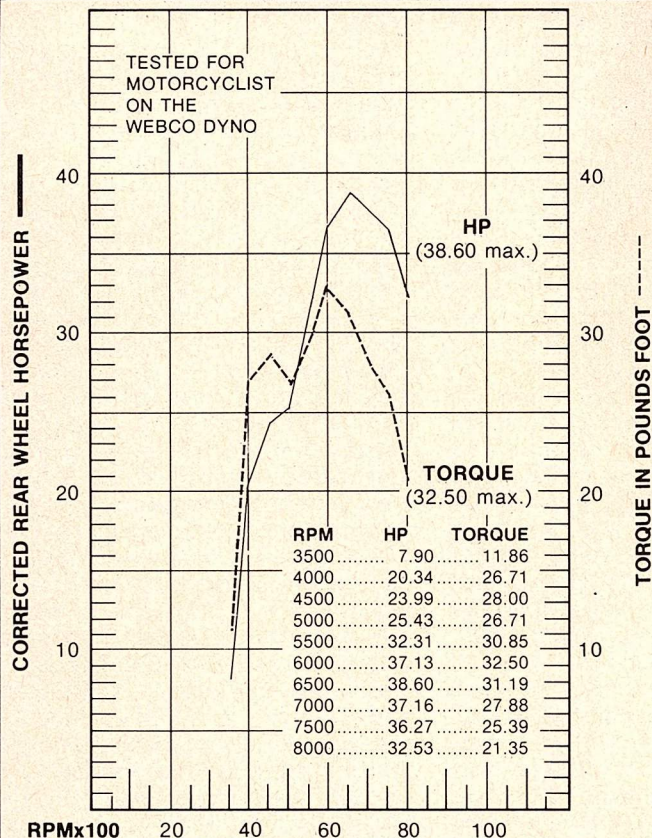
Metzeler. But as delivered, the Can-Am should still dust the competition pretty routinely. The better the traction, the bigger its advantage.

One place where the bike's dyno blitz works just fine is when coming out of corners. Starting at 4000 rpm acceleration is instantaneous and exhilarating. The midrange power isn't so explosive as to induce a lot of wheelspin, since it is held in check by the heavy flywheel inertia. The midrange is a *bunch* stronger than that of any other maxo-crosser and catapults the bike out of turns hard and fast. The throttle must be used with restraint when the machine is still leaned over, unless traction is excellent.

When piloting the Can-Am, traction takes on a great deal of importance. It limits the bike in a number of ways. The Dunlops are fine on a nice, moist, loamy track, but on a dry, dusty circuit they become skatey and unpredictable. Dunlop will be coming out with new tires designed specifically for hard tracks, but until they do, Metzeler would be better.

With the optional Ohlins shocks bolted in place the Can-Am is among cushy company. These shocks come stock on the KTM and Husky, though these two bikes feature suspension geometry that delivers more wheel travel than the 400's 11 inches. The excellent Ohlins make the MX-6 the

CAN-AM 400 MX-6



PRICE

| | |
|----------------------|--------|
| 1980 CAN-AM MX-6 400 | \$2299 |
| 1980 HUSQVARNA CR390 | \$2395 |
| 1979 KTM MC-80 420 | \$2400 |

2000 2200 2400 2600 2800

HORSE POWER

| | |
|----------------------|-------------------|
| 1980 CAN-AM MX-6 400 | 38.60 at 6500 rpm |
| 1980 HUSQVARNA CR390 | 35.81 at 6500 rpm |
| 1979 KTM MC-80 420 | 37.68 at 7000 rpm |

25 30 35 40 45

WET WEIGHT

| | |
|----------------------|----------|
| 1980 CAN-AM MX-6 400 | 243 lbs. |
| 1980 HUSQVARNA CR390 | 249 lbs. |
| 1979 KTM MC-80 420 | 247 lbs. |

230 235 240 245 250

SUSPENSION TRAVEL

| | | |
|-------|----------------------|----------|
| FRONT | 1980 CAN-AM MX-6 400 | 11.3 in. |
| REAR | 1980 CAN-AM MX-6 400 | 11.0 in. |
| FRONT | 1980 HUSQVARNA CR390 | 11.8 in. |
| REAR | 1980 HUSQVARNA CR390 | 12.4 in. |
| FRONT | 1979 KTM MC-80 420 | 10.8 in. |
| REAR | 1979 KTM MC-80 420 | 12.5 in. |

9 10 11 12 13



Suggested retail price.....\$2299 with S & W shocks
\$2459 with Ohlins shocks

Warranty.....None

Number of U.S. dealers.....364

Cost of shop manual.....\$12

ENGINE

Type.....Two-stroke reed-valve single

Displacement.....399cc

Bore x stroke.....84 x 72mm

Compression.....12.0:1

Carburetion.....1, 38mm Mikuni slide-needle

Ignition.....CDI

Lubrication.....Premix

DRIVETRAIN

Primary transmission.....Straight-cut gears, 2.60:1

Clutch.....8 plates, wet

Final drive..... $\frac{5}{8}$ x $\frac{3}{8}$ (No. 530) chain, 46/14

CHASSIS

Fork.....Marzocchi 38mm, 11.3 in. travel

Shocks.....S & W or Ohlins, 11.0 in. wheel travel

Front tire.....3.00-21 Dunlop Sports Senior

Rear tire.....5.00-18 Dunlop Sports K88

Rake/trail.....29°/5.78 in. (146mm)

Wheelbase.....58.25 in. (1479mm)

Seat height.....38.25 in. (971mm)

Ground clearance.....12.5 in. (317mm)

Fuel capacity.....2.0 gal. (7.57 liters)

Wet weight.....243 lbs. (110kg)

Colors.....Orange

PERFORMANCE

Power to weight ratio.....6.3 lbs./hp

RPM at 60 mph in top gear.....6058 rpm

Speed in gears at (redline).....(6500) 1st 20.22 mph;

2nd 29.42 mph; 3rd 42.03 mph;

4th 53.01 mph; 5th 64.46 mph

best bump-handler ever to come out of the Bombardier factory. The shock action feels firm, but not harsh. The wheel stays on the ground effectively on ripples and stutter bumps, so acceleration and braking are more predictable. The ride isn't quite as plush as that of the KTM or Husky, but it's a cut above the Japanese open bikes. The Can-Am won't wear you down prematurely with a lot of harshness or pounding from the rear end. It's a whole different story if the standard S & Ws are used. The ride is harsh, particularly on square-edged bumps and ripples; the S & Ws let the Can-Am bounce sideways a little too easily and too often to make going fast comfortable. They would be adequate for play riding, but we'd recommend the Ohlins to anyone planning to race a MX-6.

They're worth the extra \$160, particularly since the Marzocchi front fork gives you a thorough battering. The last thing you need is a pummeling from the rear too. Overly stiff compression damping keeps the 11.3-inch travel leading-axle fork from absorbing sharp jolts smoothly. Most tracks are lined continuously with sharp, jolting bumps, so when riding the Can-Am your forearms take a serious beating. The fork is at its worst when entering slow corners. Heavy braking transfers much of the bike's and rider's weight forward, so the fork's rude behavior is accentuated. Since the wheel won't follow surface irregularities accurately, traction suffers also. You can't brake or turn as hard as you might like, because the wheel spends all together too much time in the air. Can-Am recommends that six to seven pounds of air pressure be run in each leg, but we found the action was best with no air pressure at all. Even then it is, at best, the least compliant fork in the open-class. A switch to lighter oil would probably improve the action considerably. The Marzochis come with five-weight oil, so some 2.5-

weight oil would be worth a try.

We feel the Can-Am's cornering quirks can be traced directly to the fork, and not the basic steering geometry. On smooth sticky turns the conventional 29-degree steering-head angle delivers precise, responsive steering. It can't quite match the Metzeler-shod KTM and Maico, but it is still nimble and responsive. It'll easily turn inside of the slow-steering Husky 390. Given the somewhat skatey Dunlops, dry turns are best negotiated on the berm, where the MX-6 feels completely at home.

The single-leading shoe brakes are standard Can-Am fare. The front unit requires a healthy two-fingered squeeze to lock the wheel and provides only average feel. With a little practice you can get accustomed to the brake and use it hard without startling yourself with a locked front wheel. The full-floating rear brake has much the same personality—adequate but not exceptional.

Our particular test bike suffered from a variety of minor mechanical problems that added up to a not-so-minor annoyance. First off, there was the intermittantly sticky carb float that routinely loaded up the engine at idle and dumped gas all over the engine cases. Numerous attempts at fixing it proved fruitless. Awkward carburetor access further added to the irritation. Then there was the leaky gas cap and fork seals. By the end of the test the Marzochis had lost enough oil to be drenched externally and allow topping out on bumps. The kill switch partially disassembled itself, but continued to function. The kickstart lever's pivot gouged into the engine case when used, carving an eighth-inch-deep notch in the aluminum. Swinging the lever in and out for use required a hearty yank to overcome the friction as the pivot ground into the case, so starting became a bit of a chore. We got to savor the routine repeatedly when the sticky carb float killed the

engine, then made the engine hard to restart.

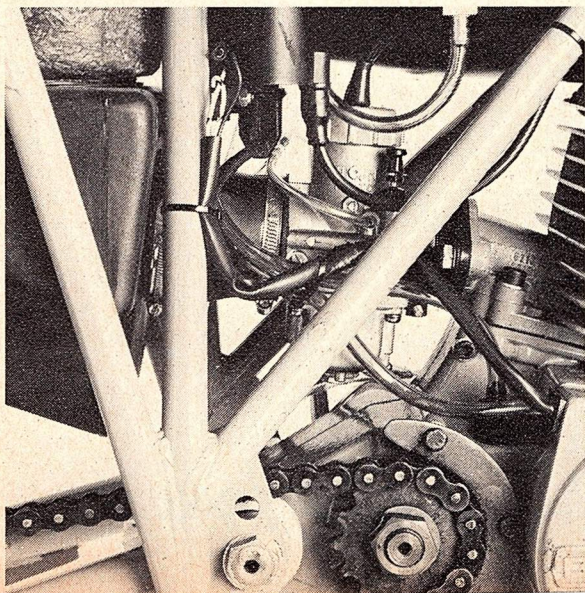
And finally we encountered chain problems due to the Can-Am's exposed countershaft sprocket. The bike was stuffed into a sandy berm with a little too much gusto, and fell over on its right side. As it did, sand got packed between the countershaft sprocket and chain. This left the chain jammed between the sand on one side, and the metal case protector on the other. All the chain slack was used up, and the rear wheel was completely locked in position. Unjamming the whole mess required a selection of tools and about 15 minutes—not the sort of thing that's conducive to winning motos. A small cover over the sprocket would probably have prevented the incident.

Several nice touches help balance out these annoyances. The Can-Am comes with a hard-to-damage folding shift lever. And a clever throttle assembly with two drums to give you a choice between quarter- and eighth-turn set-ups. We settled on the quarter-turn arrangement since it provided more precise throttle control and a lighter pull. More ingenious still is the through-the-frame air intake system. Air enters through two scoops on the steering head behind the numberplate and flows through the backbone into the sealed airbox. The engineers found that this offered a slight increase in power, besides delivering clean, dry air to the two-stage filter. We can't attest to the system's water resistance, though it definitely keeps the element clean a long, long time. After four days of riding, the outer foam sock had about the equivalent of an afternoon's worth of dust if used in a conventional air box. Getting at the filter is a little complicated, as the seat is secured with six nuts, and it must be removed to gain access.

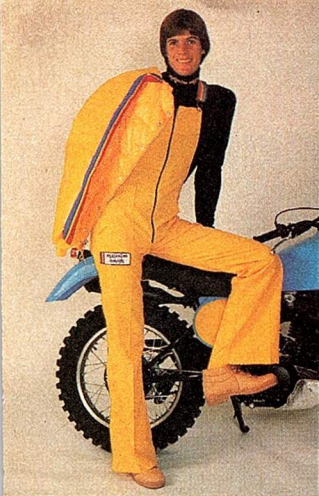
It's obvious that the MX-6 still has an assortment of rough edges. The only ones that directly affect it on the track are the unresponsive front fork and the unremarkable tires. With such a killer engine there's no room on the machine for any substandard pieces. You need all the handling and traction you can get to harness the Rotax Pro-Stock power.

Right out of the showroom, the Can-Am could easily win, given a smooth loamy track. But on the rough circuits, the bike will be hampered by the uncooperative front end. If the rider is willing to sort out the fork and slip on a set of sticky tires—look out. With these changes the Can-Am will be able to better capitalize on its tremendous engine performance. There's nothing like cubic horsepower to humiliate the competition and win races.

AM



A tangle of frame tubes, wiring and hoses prevent easy access to the Mikuni's choke. Close fitting case guard allowed dirt to jam the chain solid. More clearance or a cover would have prevented the whole problem.



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Cotton blend shirts for riding or casual wear.

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Yellow or blue with European styling and rainbow suspenders.

GRABBERS

"Quilted" leather boots for men and women.



GOLD MEDAL GOGGLES

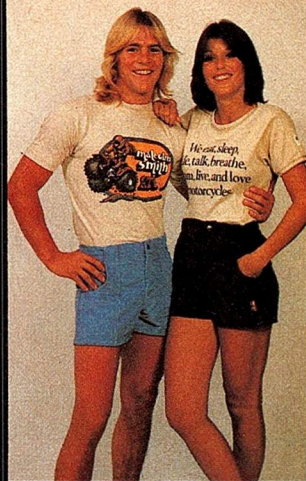
The quality goggle designed for comfort in four colors with matching face masks. Clear, polaroid, mirror, smoke and tear-off lenses.

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Corduroy shorts in blue, yellow, brown sizes 27-36.

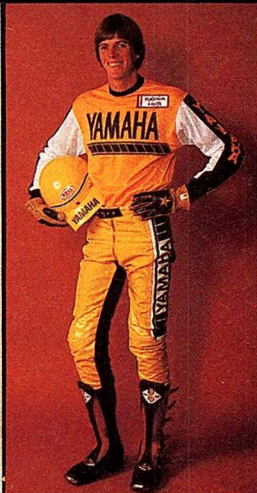
GOLD MEDAL T-SHIRTS

New ATC and many other team names in long or short sleeves.



GOLD MEDAL ENDURO JACKETS

The classic, nylon riding jacket with velcro pockets comes in four colors and four sizes. Machine washable. Color co-ordinated fanny packs and canteens available too.



Bruce Penhall

Mike Bell



GOLD MEDAL PANTS

Nylon and leather, all nylon or all leather pants include snap-out hip pads, knee and shin cups. Available in sizes 26-40 in eight color combinations. Custom lettering with quick service.



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The new 100% cotton jerseys or the standard nylon mesh available in all popular brand names and sizes.



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MALCOLM SMITH SIGNATURE

MIKE BELL SIGNATURE

STAR GLOVES

Tough yet soft leather gloves in all sizes.



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The original nylon and velcro wallet in 16 color combinations for men and women. Matching Rainbow belts also available from us.



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Constructed of the highest quality leather and vibram soles in MX or Enduro models. Adult sizes 4-14 and all half-sizes. Children's boot in sizes 3-5½ and all half-sizes. You can get a perfect fit with our boots!

GOLD MEDAL SOCKS

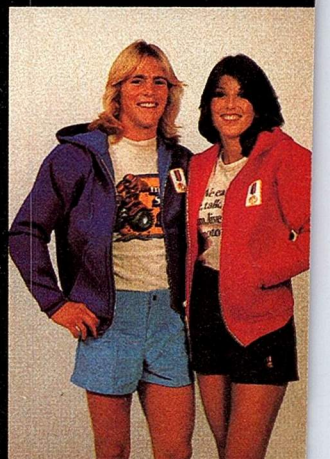
Five no-fade colors and two sizes.

MEDALIST SWEATSHIRTS

The classy one in red, blue, yellow sizes XS-XL.

GOLD MEDAL SPORTSHIRTS

Our ever popular slogan that shows how we feel!



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Does Brad Lackey ride for Kawasaki because he's crazy about the color green?

All last year, Brad Lackey was out there painting Europe green. Winning motos. More motos than anyone else on the circuit. That's what Kawasaki green stands for—winning. Take a look at the KX125. Lightweight, strong, power to blast you out of the corners, and it comes with the new Uni-Trak™ suspension. That's a winning combination.

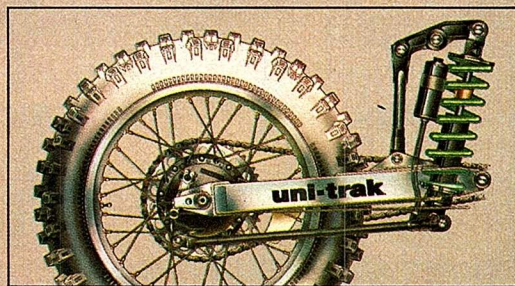
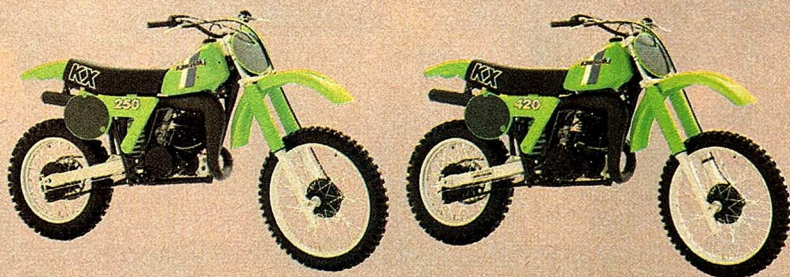
The KX250 and the KX420 are equally exciting, and all have Uni-Trak suspension. All three are built to keep the weight down.

Chrome-moly frames, aluminum box-section swingarm, plastic fenders and fuel tanks.

The lightweight engines all share CDI ignition, reed valve assembly, and the exclusive Electrofusion cylinder for good heat transfer, optimum lubrication, and resistance to seizing. And each of them has the power to win.

Then there's the Uni-Trak. This single-shock rear suspension is revolutionary. It really puts the power to the ground and that makes for better acceleration and better stability. Uni-Trak keeps the center of gravity low and under





the rider so you don't get that "lead in the gas tank" feeling. Since it's a single shock, you never have to worry about uneven damping. Both spring preload and compression damping are adjustable. When you combine Uni-Trak with adjustable air-spring front forks, you get

the winningest suspension on the market.

Sure Brad Lackey likes the color green. Remember what he said: If you ain't got the greens, you're gonna get the blues.

Check out the green meanies at your local Kawasaki dealership. Then go out and win.

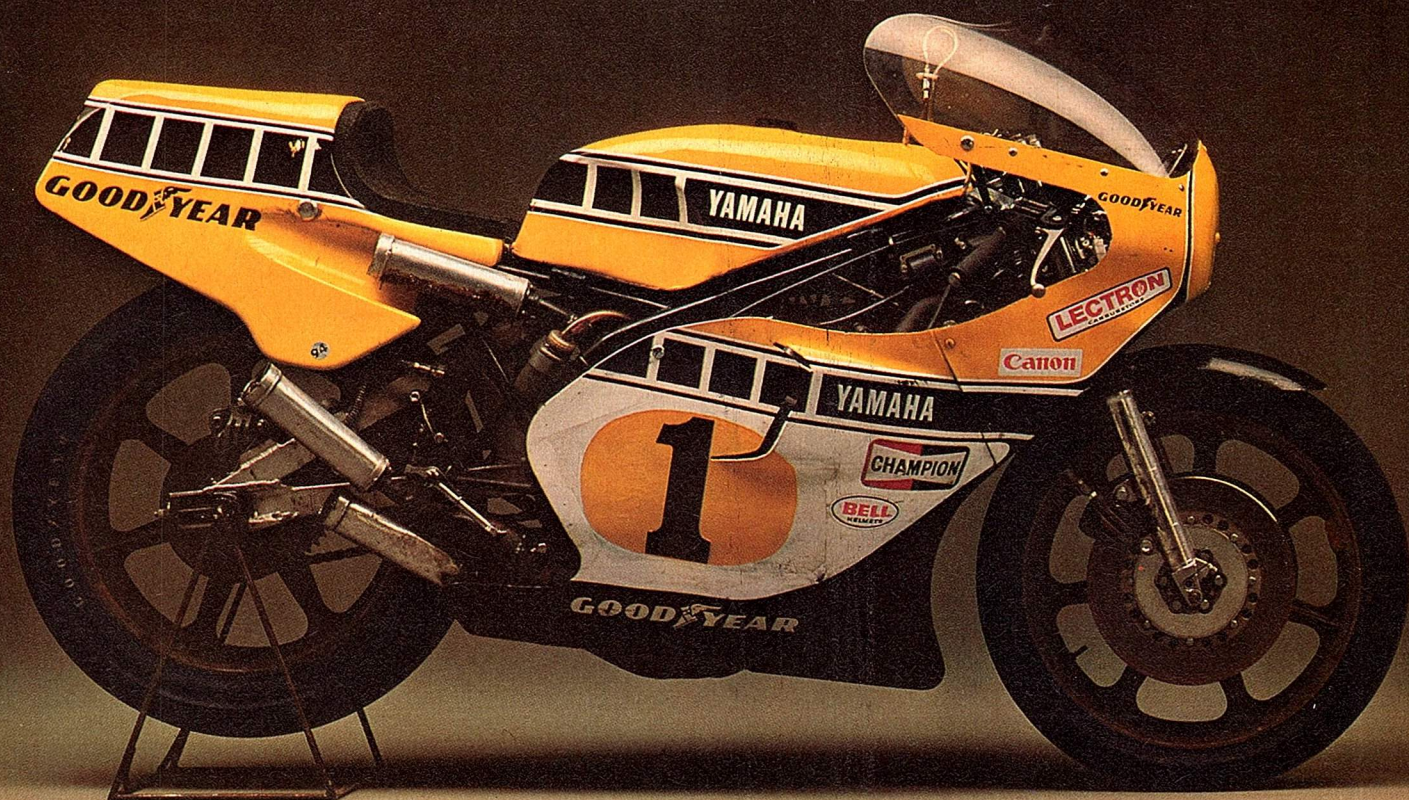
Kawasaki

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Kawasaki believes in riding safely. Check local laws before you ride. Member of AMA, MIC and MFS. Specifications and parts subject to change without notice. Some models availability may be limited.

EVERY TIME YOU



At Yamaha our most important research and development work isn't done by theory-loving engineers in white lab coats. It's done by go-for-broke racers in helmets and leathers.

We believe the fastest, most thorough way to see if our R&D ideas work is to let the fastest riders test them. And the quickest way to come up with new ideas is to ask the men who want to be even quicker.

Like two-time World Grand Prix champion Kenny Roberts. No one can push a motorcycle

to its limits like Roberts can. In one two-hundred-mile road race, he can prove more about the soundness of our engineering innovations than we can in two thousand miles of road testing.

And every time Kenny rolls into the pits he's got some ideas on how to make even better suspension systems, transmissions, brakes and engines.

Bob Hannah and Broc Glover run our YZ's

EWE RACE, WIN.



into the ground every Sunday. Then, before they've even dusted themselves off, they suggest things that might make their motocross machines even better. Obviously they know what they're talking about. "Hurricane" Hannah has won three straight Supercross titles and two straight 250cc National championships. And Broc has raced his 125cc YZ Monoshocker to three straight National titles.

That's a lot of number one plates on Yamahas. Team Yamaha is the winningest com-

bination of motorcycle racers one factory has ever had. And a very big reason why we build the most advanced motorcycles in the world.

At Yamaha we don't build great motorcycles just to win races. We win races so we can build great motorcycles.

YAMAHA

When you know how they're built.

YAMAHA XS850 SHAFT

As the automobile industry struggles to downsize, power hungry bikers have generated an upsizing race among the Big Four.

For every destination there is a choice of routes. Usually there's a direct, wide, heavily used super-highway. Or you can take the meandering, narrow, less used back road. That was the choice confronting us. Our destination was Las Vegas, Nevada, just under 300 miles up Interstate 15 from Los Angeles. But it was 400 miles if we went over the mountain roads winding through Angeles National Forest then across the deserted two-lane blacktop in the desert. Of course, we chose the latter route, away from the diesel smoke, speed traps, billboards and creeping motorhomes.

That's how we baptized Yamaha's new 850 triple. We strapped on a minimum of luggage and headed for Vegas, cruising undisturbed at 85 mph on forgotten desert by-ways, burbling quietly through sleepy little towns and diving through sweeping turns and dead-slow hairpins in the San Gabriel Mountains. Not until halfway through the trip home did we venture out on to the crowded super-slab. It was a good mix for a trip and it suited the shafty's personality.

The new XS850G is essentially just a bored-out version of Yamaha's 750 double-overhead-camshaft triple. The 1980 model year ushers in more stringent Environmental Protection Agency motorcycle emissions standards. This means that many models have to be significantly changed to meet the tighter regs, and since they are already changing their tooling, it's logical for the motorcycle manufacturers to make other changes at the same time. Since the Suzuki GS850 was muscling into the XS750's territory, Yamaha rose to the challenge by enlarging the triple's bore by 3.5mm to raise displacement

from 747.3 to 826.2cc. This gives the 850 the same bore (71.5mm) and stroke (68.6mm) as the 1100. This required new pistons, rings, cylinders and cylinderhead. A slightly different combustion chamber shape is used, but the compression ratio remains the same as 1979 (but lower than 1977) at 9.2:1.

The 850 uses constant-vacuum carbs that are nominally the same size (34mm) as the XS750 had from late 1977 on. However, these carbs, which are made by Hitachi instead of Mikuni, show a very automotive influence and have fixed jets and unadjustable needles. The Hitachis use Mikuni-like plungers ("chokes") in their starting-enrichment circuits and they appear more complicated, although Yamaha says they are easier to disassemble and clean.

On the other end of the combustion process, the 850 has mufflers that are 100mm (3.9 inches) shorter

than the XS750's. This was apparently done for styling rather than performance, and the exhaust system is laid out as before with the center and left pipes dumping into the right muffler, with no connection to the left side muffler.

One of the most notable changes to the bike is the addition of an oil cooler, which should be welcome in hotter climates. Some early 750 triples had overheating problems and the bigger bike will probably make more heat. Yamaha adapted the cooler using a technique employed by some after-market oil cooler companies. A spacer/adaptor plate under the oil filter cover picks up oil from and returns oil to the filter to divert oil through the cooler. This has increased oil capacity a fifth of a quart.

There are no basic changes to the three-cylinder's layout. The engine's two cams are driven by a chain on the left side. Also on the left end of the crank is the ignition system's electromagnetic triggers.

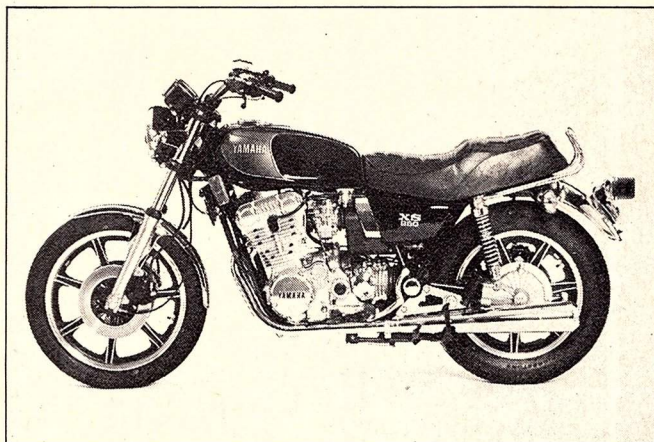
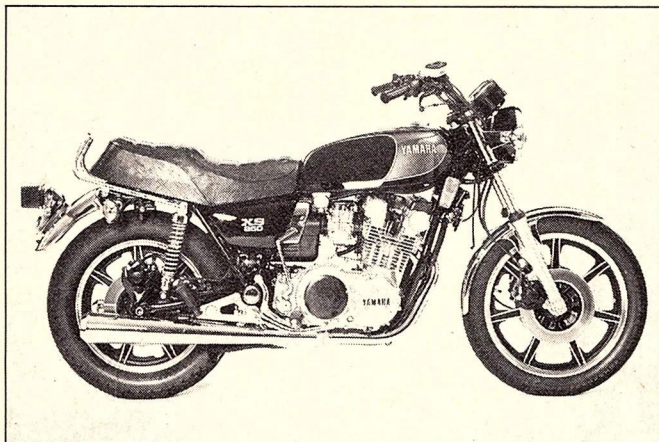
This year the link-plate primary chain (located on the right end of the crank and outboard of the clutch) has been widened a quarter-of-an-inch to 1.25 inch. The clutch, which still has its basket facing inward, now has two more plates. The friction plates (formerly 3.0mm thick) are now 2.8mm thick, and the metal driven plates are 2.0mm thick.

For the second time since the triple's introduction, Yamaha has lowered the overall gearing. The transmission's countershaft feeds power to a jackshaft through a pair of spur gears at the right ends of both shafts. The jackshaft then runs across to the left side to feed power into the driveshaft through a pair of bevel gears which run in a sealed





YAMAHA XS850

**PRICE**

| | |
|---------------------|--------|
| 1980 YAMAHA XS850G | \$2849 |
| 1979 YAMAHA XS750F | \$2698 |
| 1980 SUZUKI GS850GT | \$3099 |

WET WEIGHT

| Model | Weight (lbs.) |
|---------------------|---------------|
| 1980 YAMAHA XS850G | 569 lbs. |
| 1978 YAMAHA XS750E | 557 lbs. |
| 1979 SUZUKI GS850GN | 600 lbs. |

QUARTER-MILE TIME

| Year | Model | Time (sec.) | Speed (mph) |
|------|----------------|-------------|-------------|
| 1980 | YAMAHA XS850G | 12.90 | at 103.3 |
| 1978 | YAMAHA XS750E | 12.94 | at 102.6 |
| 1979 | SUZUKI GS850GN | 12.97 | at 103.8 |

AVERAGE FUEL CONSUMPTION

| Year | Model | MPG |
|------|----------------|------|
| 1980 | YAMAHA XS850G | 35.4 |
| 1978 | YAMAHA XS750E | 45.0 |
| 1979 | SUZUKI GS850GN | 36.1 |

HIGH-SPEED PASS, TERMINAL SPEED

| | |
|---------------------|----------|
| 1980 YAMAHA XS850G | 73.8 mph |
| 1978 YAMAHA XS750E | N.A. |
| 1979 SUZUKI GS850GN | 70.9 mph |

**AVERAGE
TOURING
RANGE**

| Model | Mileage (miles) |
|---------------------|-----------------|
| 1980 YAMAHA XS850G | 159 |
| 1978 YAMAHA XS750 E | 202 |
| 1979 SUZUKI GS850GN | 209 |

| | |
|-----------------------------|---------------------------|
| Suggested retail price..... | \$2849 |
| Warranty..... | 6 months, unlimited miles |
| Number of U.S. dealers..... | Approx. 1600 |
| Cost of shop manual..... | \$8.00 |

ENGINE

| | |
|----------------------|--------------------------|
| Type..... | Four-stroke DOHC triple |
| Displacement..... | 826cc |
| Bore x stroke..... | 71.5 x 68.6mm |
| Compression..... | 9.2:1 |
| Carburetion..... | 3, 34mm Hitachi CV |
| Ignition..... | Transistorized pointless |
| Lubrication..... | Wet sump |
| Lighting output..... | 210 watts |
| Battery..... | 12V, 14AH |

DRIVETRAIN

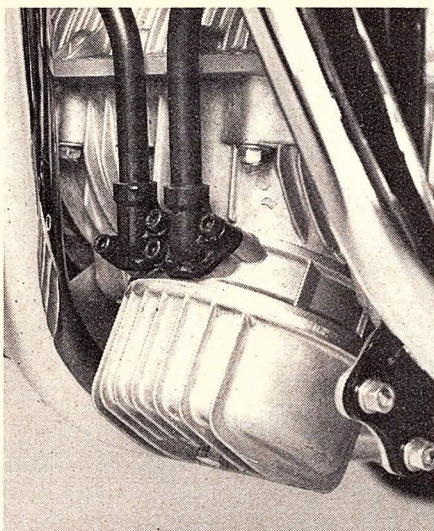
Primary transmission.....Link-plate chain, 1.67:1
Clutch.....16 plates, wet
Final drive.....Shaft, 3.466:1

CHASSIS

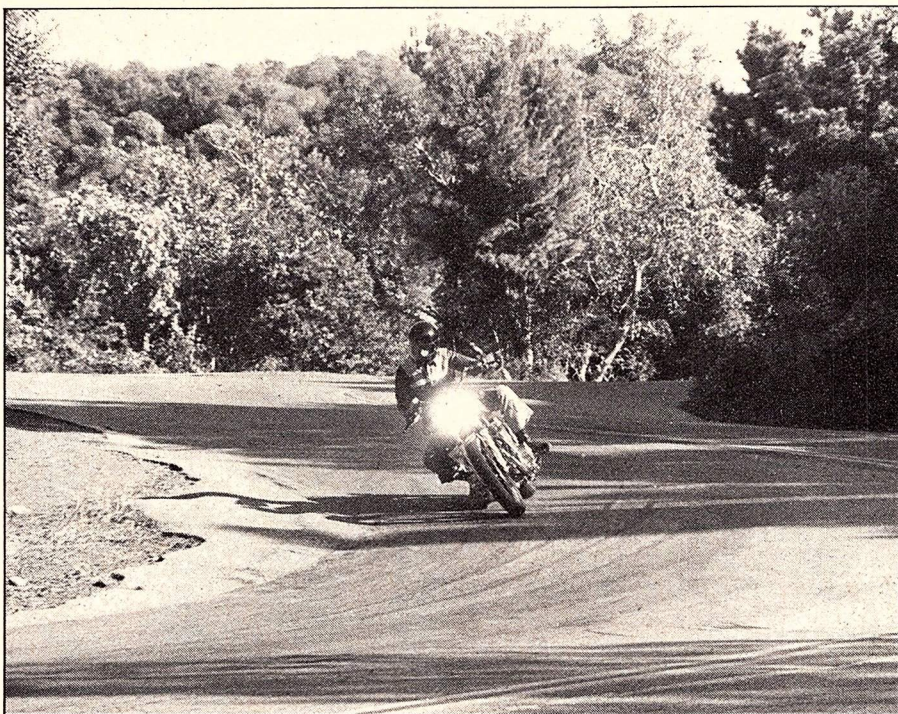
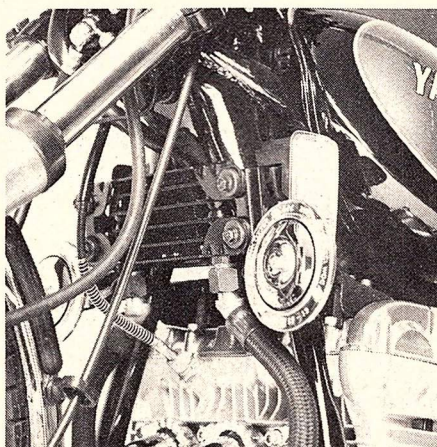
| | | | |
|-----------------------|---------------|----------------------|----------------|
| Fork..... | Kayaba | 36mm air/spring, | 5.4 in. travel |
| Shocks..... | Kayaba, | 3.7 in. wheel travel | |
| Front tire..... | 3.25H19 | Bridgestone tubeless | |
| Rear tire..... | 4.50H17 | Bridgestone tubeless | |
| Rake/trail..... | 27°/5.16 in. | (131mm) | |
| Wheelbase..... | 57.1 in. | (1450mm) | |
| Seat height..... | 32.2 in. | (818mm) | |
| Ground clearance..... | 7.2 in. | (183mm) | |
| Fuel capacity..... | 4.5 gal. | (17 liters) | |
| Wet weight..... | 569 lbs. | (258kg) | |
| GVWR..... | 975 lbs. | (442kg) | |
| Colors..... | Black | | |
| Instruments..... | Speedo, tach, | tripmeter | |

PERFORMANCE

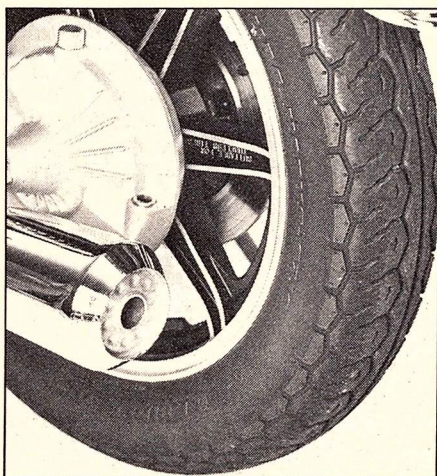
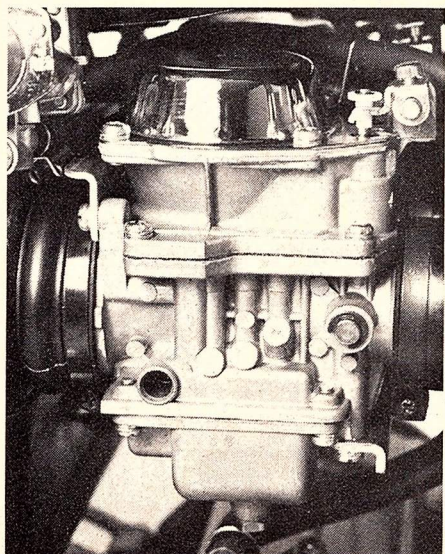
| | |
|----------------------------------|---|
| Fuel consumption..... | 29 to 41 mpg, 35.4 mpg average |
| Average touring range..... | 159 miles |
| Quarter-mile..... | 12.90 sec. at 103.3 mph |
| RPM at 60 mph in top gear..... | 4490 rpm |
| Speed in gears at (redline)..... | (9000) 1st 51.4 mph; 2nd 74.0 mph; 3rd 90.4 mph; 4th 107.3 mph; 5th 122.9 mph |
| Speedometer error..... | 30 mph, 30 actual 60 mph, 62 actual |



Previously shied away from by motorcycle manufacturers, oil coolers can prolong engine life and improve dependability.



Although it's 20 pounds lighter than the Suzuki GS850 and has the same highly adjustable suspension systems front and rear, the XS850's handling feels heavier and less precise. The XS850 also doesn't feel as stable during fast, hard cornering.



Even externally, the Hitachi carbs (left) look more complicated. Yamaha's cast alloy wheels now carry tubeless tires.

case in their own lubricant. As in 1977 when the 750's gearing was lowered, the 850's ratio was changed by juggling ratios at the point where the countershaft drives the jackshaft. Additionally, the cush drive formerly incorporated in the jackshaft has been eliminated, a change made in the last batch of 750 triples.

We're not sure what the reason for the gearing change was. The 750 had plenty of low- and mid-range power and the 850 has even more. The lower gear ratio has undoubtedly given the bike more snap, but it also means the engine runs a couple hundred revs faster at cruising speeds (about 4500 rpm at 60 mph). That means a slight increase in vibration and possibly even a minor decrease in fuel consumption.

Vibration is the bane of three-cylinder engines and the 850's mill is no exception (as the rider can verify by putting his foot on the crankcase while riding down the road). To isolate the engine and its vibration, Yamaha uses an unusual engine mounting arrangement. Essentially, the engine is mounted in just two places—at its lower front "corner" and at the lower rear. At the front the crankcase bolts to the frame via two pairs of flimsy-looking plates. These are apparently intended to flex and thereby damp the vibration. The rear mount is a single long bolt running across the frame through a lug in the cases and resting in rubber mounts. Other pieces, like the exhaust systems (also rubber mounted) and drive shaft also help locate the engine, but there's only three actual mounts. If you hold the front brake on and rock the motorcycle vigorously, you can see—or feel—the engine move in the frame. The gap between cylinderhead and the front frame downtubes varies noticeably.

If this system didn't have a proven record, we'd wonder if an engine as powerful as the XS850's would stay in place. Since the introduction of the E-model XS750, the Yamaha triple has produced gobs of horsepower and torque. Although the powerband has moved down a bit in the rev range, adding 79cc hasn't hurt the triple's overall output a bit. The engine is already conducting *serious* business when the tach needle swings past 3500 rpm and the bike accelerates willingly below 2000. It feels eager at 3000 rpm and by the time it's making 4000 rpm, the 850 engine gives you the impression that it's turning 1000 revs faster. This is partially because the triple is a noisy, busy-sounding engine, but it's due mostly to the terrific power and acceleration available. We don't normally expect that kind of power and acceleration until a higher rpm. The

XS feels more like a 1000 than an 850 in the strong middle part of its powerband and you can rocket past slower traffic with nary a downshift.

The power levels off at about 7500, then drops fairly sharply around 8000—well below the 9000-rpm red-line. Out on a forgotten back road in Nevada, we made a top-speed run. In fifth gear the engine wouldn't pull past 8100 rpm even after a two- to three-mile run. At that engine speed it's going about 107 mph.

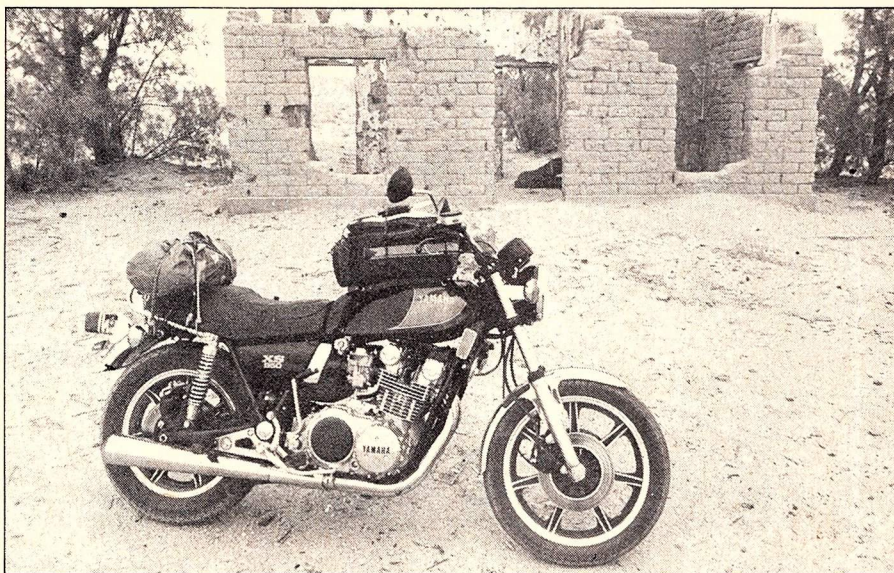
The (1978) E-models pulled harder on top end, but the lack of top-end urge didn't discourage the 850 at the dragstrip where it ripped off a best run of 12.90 seconds at 103.3 mph on a hot pass. Its terminal speed in our 50-mph, top-gear-only, 200 yard roll-on acceleration test was an impressive 73.8 mph.

The XS850 warmed up quickly even on cold mornings and was rarin' to go in the time it took the rider to put his helmet on. You could turn the choke off almost immediately. Some of the credit probably goes to those Hitachi carbs. On the other hand, fuel mileage was one of the 850's weak points. Our 35.4 mpg average was undoubtedly lower than what most riders would get and reflects more hard use than is normal even in our road tests. We would expect a higher average—closer to 39 or 40 mpg during more moderate riding. However, the best we got was only 41 mpg. The worst was 29. The old E-model 750s averaged over 40 mpg when tested in 1977.

Smooth, consistent clutch and gearbox action made shifting and pulling away effortless. However, the XS has the same glitch we moan about in almost all shaft-drive bikes—lash. The 850 wasn't as bad in this respect as last month's XS1100G, but there was enough lash to cause the usual minor difficulties in traffic and while cornering. Something the Hitachis haven't eliminated is the abrupt throttle response typical of CV carbs and this tends to aggravate the lash situation.

The 850 has respectable cornering clearance despite a slight lowering of ride height because of the new 17-inch (formerly 18-inch) rear tire. The Bridgestone rear tire felt a little squirmy during hard cornering, but it never actually let go, even when one or another of us were doing some serious peg-scrapping.

An increase in trail (now 5.16 inches) has made the triple's steering effort just slightly greater than average for bikes in this range and its steering slowness is particularly noticeable at low speeds. Steering precision is perfectly acceptable, but it's not up to the standards of a Honda CB750F or even of Suzuki's 850



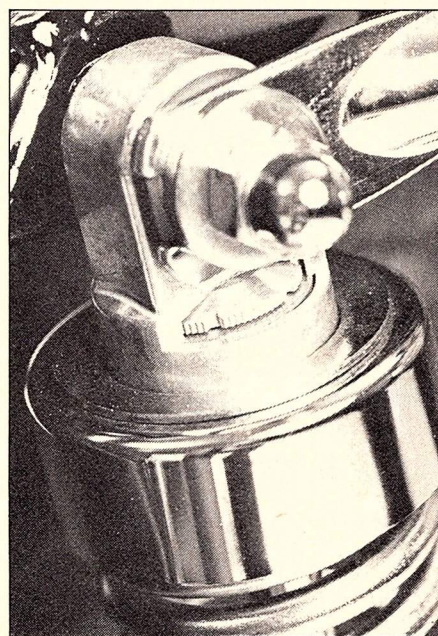
The dial-your-own-damping Kayaba shocks compensate for changes in load, or riding style and also seem durable.

shafty. Nor does the Yamaha feel quite as steady and solid during hard, high-speed corner-charging. We noted a slight twitch when changing throttle settings in mid-corner as the drive-train lash was reeled up. Some of this may have been the engine wiggling around on its flexible mounts.

There's certainly nothing to complain about in the suspension department. The new air-assist feature on the fork (which also has springs) gives the rider a choice of ride-height/"spring-rate" settings for any situation. Yamaha recommends a maximum of 36 psi in the fork legs. We used about 12 or 14 pounds of air boost for solo riding and had no complaints about road holding in smooth or bumpy corners, or about ride. The updated suspension hasn't hurt in the least the Yamaha's famous ultra-smooth ride over those annoying little seams. At the rear, we used the No. 1 or 2 damping setting with one of the lowest two spring-preload settings for solo riding.

The ride is complemented by a good saddle. Despite the moderate step in the seat, we found we could move comfortably and freely back and forth on long rides without being poked by any ledge in the padding. This is only the second stepped seat in our experience that's really given the rider this freedom to shift his position. The seat was also shaped and padded well in other respects. It took about 300 miles before our butts began feeling stiff.

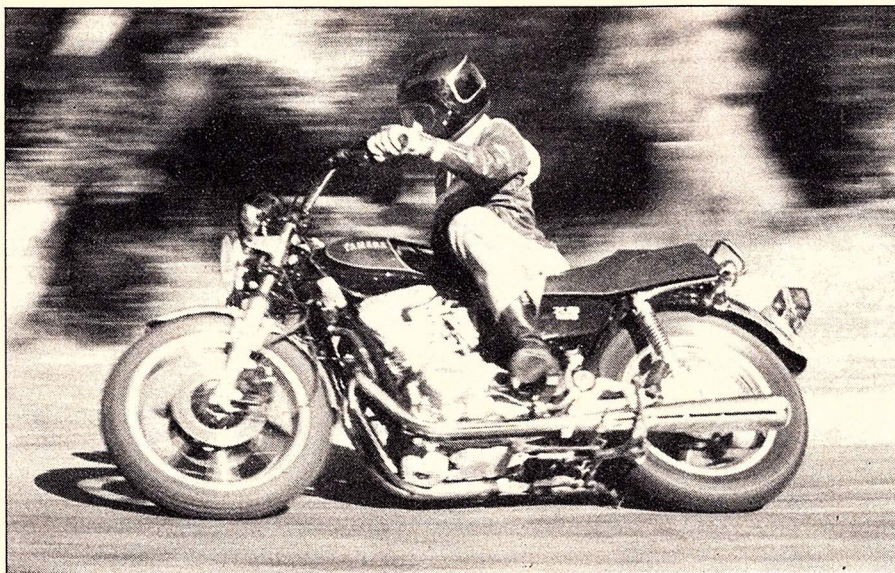
The only significant source of potential discomfort is vibration and it will probably only trouble riders who are particularly sensitive to buzzing or shaking. If a Triumph or XS650 doesn't bother you, this won't either. If you're kind of annoyed by a BMW



or Kawasaki 1000, stay away from the XS850. Despite Yamaha's efforts to banish vibration from the chassis, vibration builds steadily with engine speed. On our XS850, the shaking was most noticeable in the right footpeg. It also reached the rider through the handlebar and the left footpeg. The centerstand has a real buzz and can touch the passenger's foot where the stand bends up. The stand is the only buzz point that will annoy everybody, unless you go out of your way to touch the engine, which is a kind of giant joy-buzzer.

We have absolutely no complaints about the 850's brakes. They are predictable and powerful even after fast riding in the mountains with lots of hard braking. The front brake has terrific feel and the lever's play may be easily adjusted to accommodate different sized hands.

The only problem we experienced with the XS850G was a sputtering response which occasionally occurred when the rider grabbed a handful of



throttle at low engine speeds. It was as if the engine was fuel-starved for a second. This didn't happen often and it wasn't severe enough to be a safety problem or even a serious annoyance. Nor could we determine its cause, although we suspect carburetion. Otherwise the bike ran fine. It used about a cup-and-a-half of oil in the first 1000 miles we rode it and there was a little oil seepage around the tach drive at the right end of the rear cam's case.

A slight restyling job hasn't signifi-

cantly changed the triple's lines. Besides the pipes and rear wheel, there's a difference in engine finish (it's bare aluminum now, not painted black) and a different line on the bottom edge of the seat which has resulted in a new side-panel shape. The new panels have large deliberate-looking bands of chrome on their leading edges.

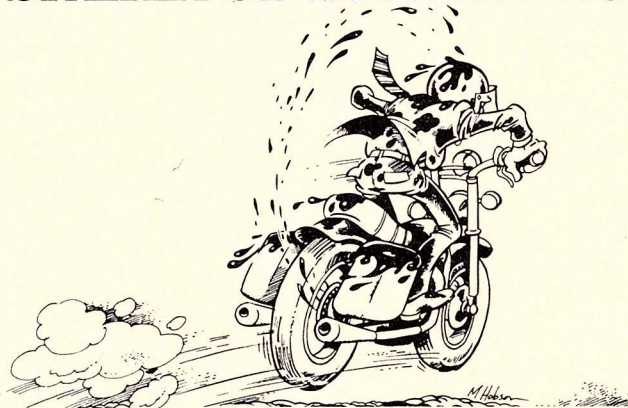
A quartz headlight is standard, as are self-canceling turn signals. The 85-mph speedometer has a redline starting at 55 mph, perhaps to re-

mind you that you are over-revving your driver's license.

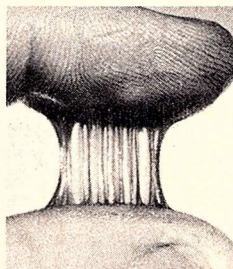
Obviously the Yamaha XS850 faces some strong competition from Suzuki's GS850, which won our cross-country heavyweight shaft-drive comparison this past June. That Suzuki was superior to this Yamaha in vibration control, handling and overall comfort. The two 850s are about equal in fuel mileage (although the Suzuki had much more range), suspension compliance, detail features and maintenance. The XS850 has considerably more power and acceleration than the Suzuki did, but we understand that the new GS850 is substantially more powerful than before. We suspect that the Yamaha will still have a power edge, although we have no way of knowing until we ride the GS. The price of the 1980 Suzuki is set at \$3099. The Yamaha's price is \$2849.

Price is just one consideration for the buyer in addition to the actual motorcycle. Other easily overlooked factors include things like the quality of the dealer. Those things matter as much as how the bike performs. However, a road test is an evaluation of hardware and function. And when Yamaha bumped their 750 shafty up to 850 and challenged Suzuki's 850 directly, they bit off just a little bit more than their triple could chew. **M**

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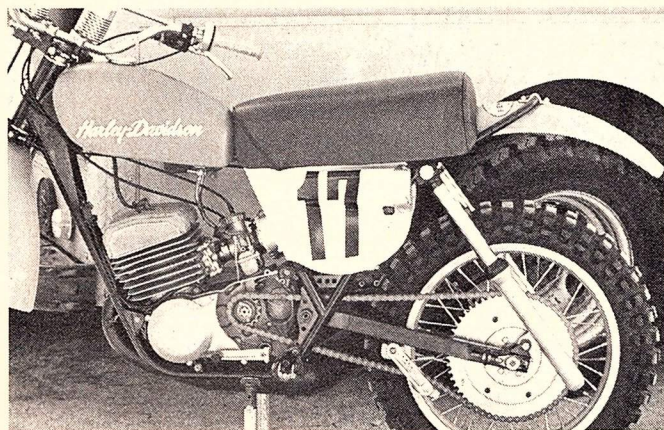
Ten Years After

Herein lies a presentation of facts, trivia, data and opinion in celebration of the decade just past.

In Part 1 of Ten Years After last month we examined the motorcycle market in the Seventies, why the British died and the Japanese succeeded, the most impressive racing achievements, the five worst bikes of the decade, etc., etc. Our time capsule of the Seventies continues this month with the hope that it makes you smile, laugh, take issue and ponder.

FIZZLES AND NO-SHOWS

1. Rotaries
2. Automatics
3. The trials boom
4. Cafe racers
5. Mopeds
6. Earnest O'Gaffney
7. The claiming rule
8. Your parts order
9. Honda Hawk streamliner
10. Commuter bikes
11. The BSA-Triumph DOHC 350
12. The Yankee Twin
13. The Yankee 460 single
14. Harley-Davidson motocrossers
15. The Harley-Davidson multi
16. Yamaha GL750 two-stroke four
17. Suzuki GT1000 two-stroke four
18. Can-Am 500 two-stroke twin
19. Evel Knievel's plan to jump the Grand Canyon
20. Evel Knievel's attempt to jump the Snake River
21. Evel Knievel's baseball career
22. Evel Knievel



Here's two fizzles in one: the H-D motocrosser itself and the idea of making long-travel rear suspension out of front forks.

BEST QUOTES OF THE DECADE

"My wife took one look at my new Harley and said, 'You gotta get rid of that motorcycle or get rid of me.' So I kept the bike."—Charlie Chisholm, Baltimore, MD

"Well, hang in there."—Heard weekly on "Then Came Bronson."

"Based on features and performance, the Taka wheelies right smack into the upper 100cc sport trail bike echelon."—Motorcyclist, October 1972.

"What the future holds, no one really knows, but knowing the engineering history of Triumph, we know it will be good."—Motorcyclist, September 1972

"Dirt riders can live on motorcycles alone, but street riders must also have women."—Dale Boller, Hollywood, CA

"The more you know, the more you know that those who don't know, don't know."—Experienced motojournalist's remark about a particularly erratic rider on a particularly decrepit custom.

"Ago didn't really win, he just finished first."—Kenny Roberts after being runner-up to Giacomo Agostini at Daytona in 1974.

"My approach to motorcycling is simple: Ride safely or don't ride."—Wildman motocross champion Bob Hannah (in magazine advertisements sponsored by the Motorcycle Industry Council).

WORST ACCESSORIES OF THE DECADE

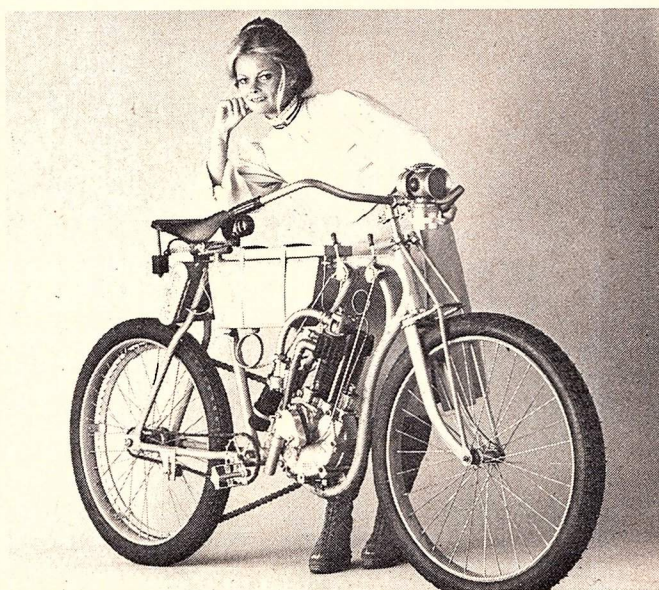
- | | |
|-------------------------|----------------------|
| 1. Bubble shields | 6. Brakeless hubs |
| 2. Light bars | 7. Sissy bars |
| 3. Disc-brake covers | 8. Floorboards |
| 4. Horsepower-in-a-can | 9. Trailers |
| 5. Twisted steel struts | 10. Swastika mirrors |

BEST ACCESSORIES INVENTED IN THE SEVENTIES

- | | |
|--------------------------|-------------------------------|
| 1. Tank bags | 8. The new-breed goggles |
| 2. Radar detectors | 9. Electronic enduro timers |
| 3. Silk masks | 10. Nylon leathers |
| 4. Full coverage helmets | 11. The face-mask goggle |
| 5. Electric riding suits | 12. Stretch-type kidney belts |
| 6. Tear-offs that work | 13. Radio alarms |
| 7. Knee cups in MX pants | 14. Gatorade |

WORST PRODUCT NAME

1. Analube



One of the first mopeds was the Harry R. Geer Blue Bird built in St. Louis in 1901. Mopeds fizzled back then too.

GASOLINE SHORTAGES

Ten years ago who would have thought the time would come very soon when gasoline would become a scarce commodity, available—when it was available—only at a premium price? Then came the October Mideast war of 1973 and the good old USA got its fingers burned for nosing into other peoples' affairs. Nothing new then, or since. The Arabs, who couldn't whip the Israelis on the battlefield, figured to do strategically what they couldn't do tactically, so they embargoed oil exports to the U.S., Israel's arms supplier, until the U.S. saw things their way. It got pretty uncomfortable for a while in 1974, but the diplomats did their thing and oil began flowing back into American storage tanks at such a rate that in 1977 it reached an all time high. And we still paid only from a half to a quarter the going world rate for gasoline at the pump. We were back in the catbird seat.

But then James Earl Carter, Esq., became president of these United States and as part of his program to see we never suffered another oil crisis, created the Department of Energy. Two years into the life of DOE, just about the time its string of regulations really began to take hold, we had an energy crisis. A hum dinger. You remember last spring how when you tried to get gas to take a weekend run on old paint you met those artistically scrawled "No Gas" signs at darn near just about every gas station you tried, and lines snaking for blocks at the few stations open. The Feds assured us it was all the fault of the monkey business going on in Iran,



Check those gas prices. Back in '73 during this Motorcyclist comparison test the station was giving away seven times the normal number of trading stamps with every gasoline purchase.

which caused a shortfall in world petroleum production of something like two percent. Well, that wasn't the reason. The reason was good old DOE, two years old, 20,000 employees strong, with a 10.8-billion-dollar budget to Xerox memos with. And the DOE has admitted it.

The worst thing about the whole mess, besides not having the gasoline we're used to, is that the free enterprise system and the big oil companies—which we will desperately need to develop new energy for the future—are getting a bunch of the blame, so much so that public opinion may force a windfall profit tax which will wipe out any fast-paced energy R & D by Texaco, Exxon, Shell, et al.

Only the "Sick Seventies" could have given us these memories to cherish by candlelight during the energy shortages due in the "Awful Eighties."

COMEBACKS

- | | |
|------------------------|------------------|
| 1. Four-stroke engines | 4. Triumph |
| 2. Four-cylinder bikes | 5. Laconia |
| 3. Big Singles | 6. Mike Hailwood |



The mighty Z-1 first appeared in 1973. We know of a black-engined original with 77,000 trouble-free miles on its clock.

THE MOST SIGNIFICANT BIKE OF THE DECADE

KAWASAKI Z-1

The Z-1 broke the Honda monopoly on Japanese four-strokes—and four cylinders—and broke the 750cc limit many believed the Japanese had promised Harley never to exceed. It also set a new standard in performance, both for stoplight draggers and long-distance tourers. It killed any chance H-D, the British or the Continentals may have had to upgrade existing designs into state-of-the-art challengers. The moment the Z-1 went on sale, every other top line over-750 became an expensive has-been. The Z-1 also foretold the demise of the big two-stroke, for it would have seemed more logical for Kawasaki to break into the Ultrabike category with a giant two-stroke, carrying on the tradition and reputation of their mighty Hs, yet the company chose to bow to future emissions regulations and go the four-stroke route, and out four-stroke Honda in the process with double overhead cams, a PCV valve, the first $\frac{3}{4}$ -pitch chain, and absolutely terrific—yet manageable (not like the two-strokes)—horsepower. It sold like mad and anchored the entire operation of a giant motorcycle company for most of the decade. No other machine born in the Seventies generated such significant impact. And few were more fun to ride.

MOST SIGNIFICANT DIRT BIKE OF THE SEVENTIES

1974 MAICO MOTOCROSSERS

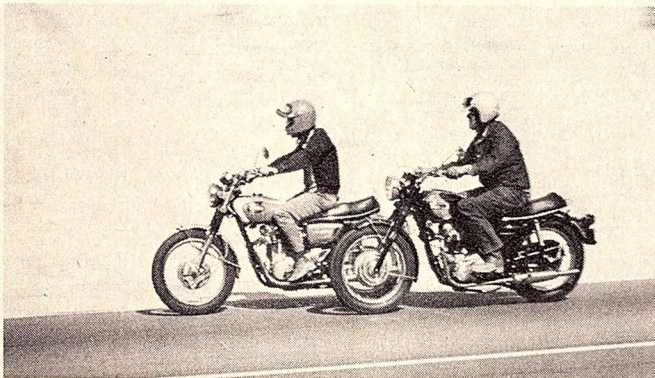
You can definitely say that Maico paved the way towards the suspension revolution with these machines. If you remember, this was the year Maico delivered a knockout blow to the competition by introducing production bikes featuring so-called "long travel" rear suspension. At a time when the emphasis was being placed on brute horsepower, Maico discovered the key to winning was getting the available horsepower to the ground—and the key to that was better suspension. Maico engineers decided that a different shock placement could improve tractability. Since there were no shocks available longer than the standard 13 $\frac{3}{4}$ -inch Girlings, the solution was simple: take the existing shocks and move both mounting points farther forward. In a blink of an eye, Maico boosted rear wheel travel from less than four inches in '73 to an enormous six inches in '74. The results were devastating to say the least. Instant superiority on the racetrack. Since then we've seen this original concept blossom into even more radical lay-down configuration suspensions that can supply more than a foot of velvet-smooth travel. But Maico will always be recognized as the pioneer of new-wave suspension technology, the technology that dominated dirt-bike evolution in the Seventies.

GREAT RACING ONE-SHOTS

1. Yamaha TZ750 milers
2. Paddle tires in motocross
3. The Preston Petty NoDive
4. 23-inch front wheels
5. Visor-Vu rear-view mirrors
6. The Baja Racing Association
7. Greg Sassaman

RIVALRY OF THE DECADE

The two most closely matched motorcycles of the 1970s are the Triumph Bonneville and Yamaha XS650. Their ten-year rivalry—the only one to encompass the entire decade—began the instant Yamaha released their “copy” late in 1969 and still rages today. No two machines have remained so close in purpose, concept and performance. They even inherited the new evolvments of the decade simultaneously: disc brakes, cast wheels, turnsignals, etc.



Both have enjoyed success in the marketplace: Yamaha's 650 has long been their biggest selling street bike and still is, rolling up sales of close to 40,000 units in 1979. Triumph sells many less units (about 6000), but its popularity is strong enough to have made it the sole survivor among the half-dozen British marques steamrollered by the Japanese.

For ten years these machines have also battled on the racetrack. Both won a National TT last year: Brad Hurst at Castle Rock on a Triumph and Steve Eklund at Ascot on a Yamaha. No other pair of motorcycles have been so often compared, so close in styling and price, so similar—yet dissimilar. Which one would we buy? Probably the Yamaha because it costs nearly \$500 less. But then again that Triumph handling. . . .

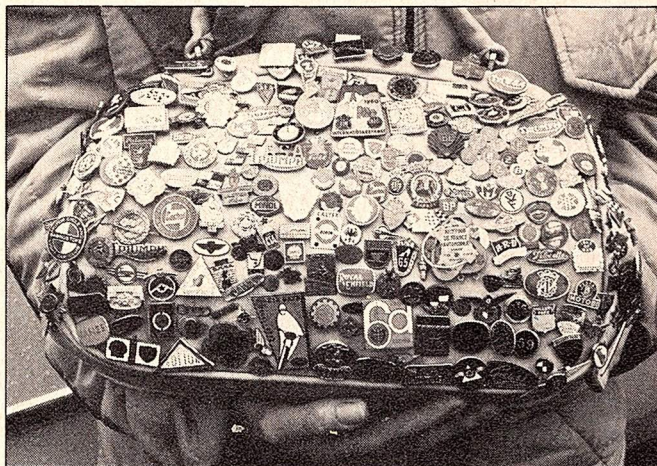
NOISE REGULATIONS: THE QUIET KILLER

Ten years ago you might have bought a bike because it sounded neat. You liked the solid beat, the rumpity-rump, or the happy snarl with which the engine announced it was ready for action. Better not have that kind of attitude today. It's against the law. Or just about. The refulgent EPA's noise regulations for 1980 say a bike may produce no more than 83 dB(A) on a noise meter placed 50 feet away from the bike. In 1982 that will be dropped to 80 dB(A), and in 1985 78 dB(A). In order to meet these standards, the EPA officially “expects motorcycles to be manufactured three decibels below the standard.” See, the Noise Control Act, one of the great achievements of mankind in the Seventies, gives the EPA the right to establish noise reduction regulations for our “health and welfare,” and the power to enforce compliance. That means stopping us from “tampering” with our bikes, including adding after-market exhausts and the like.

The EPA has determined that motorcycle “noise intrusions

interfere with normal activity and cause annoyance on the part of persons so impacted.” And, by God, that has got to stop. You bet it's going to, and who cares how many businesses go under as a result? The EPA sure doesn't give an after-dinner deposit. Says the EPA, “If the standards established in the final rule prevent Harley-Davidson from being able to remain in business,” 3000 jobs will be lost. Tough. The EPA also admits it will be “difficult” for “some small manufacturers (read the Europeans) to stay in business.” Tough. In addition, according to the EPA's own research, more than 100 businesses currently making after-market exhaust systems won't be able to meet the new noise regulations and will disappear. Tough. Still, the EPA says the regs will have no “consequential effect” on the U.S. economy. What about the 10 percent increase in fuel consumption the EPA predicts motorcycles will suffer once the new regs are in force? That will mean hundreds of millions of gallons more oil imported each year. So what? Each bike will on the average cost \$140 more to buy with the quiet technology installed. So what? And on and on.

It all happened in the Seventies. In the Eighties you may look back on this decade as the last era for many personal freedoms. One of them will be a “noisy” motorcycle, say one not quite as loud as a Volkswagen Beetle.



PINS AND STICKERS

The 1970s brought a mania of pin and sticker collecting to America. You can always tell a dirt bike rider by the huge number of stickers on the rear window of his van. Expensive cloisonne pins can be bought and traded all over the world, especially at the ISDT where this photo was taken in 1973.

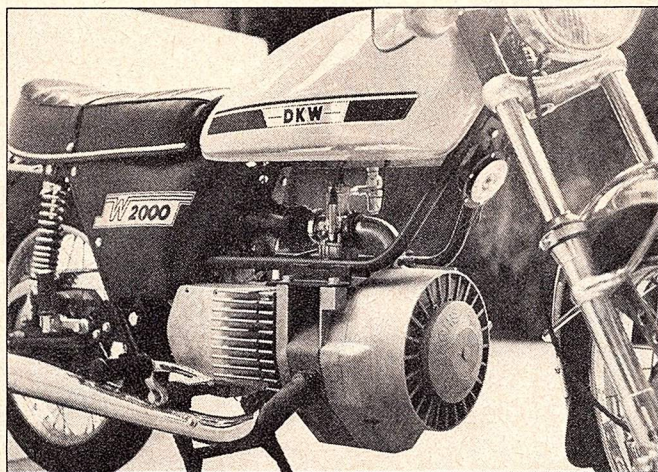
THE ROTARIES

Hercules had one, Suzuki had one, Yamaha unveiled one, Norton kept testing one: the wave of the future. Rotaries. Super smooth power in a compact, lightweight package. Torque characteristics such that you would scarcely need to shift gears. Exhaust emissions cleaner than a two-stroke could ever exhale. It was to be truly the dawn of a new era. And it was to happen in the Seventies.

Didn't happen. Hercules was a marginal brand in the U.S. and the device it created was ugly, slow and not all that reliable. It also burned a lot of gasoline. Yamaha's RZ201 twin-rotor beauty really had a motor designed for use in out-board motorboats. Built by Yanmar, it was engineered with slow throttle changes and constant cruising in mind, and with a constant stream of fresh cold water flowing around it to cool the super exhaust heat this type of motor generates. Yamaha could have refined it, but four-strokes were known sellers and the technology to build state-of-the-art Honda-challengers was easily accessible.

Norton seems just not to have had enough money or a clear enough management decision to go with the rotary. Perhaps we'll see a version of it in the Eighties. That leaves us with Suzuki, which brought forth the only viable rotary-engined motorcycle ever manufactured. Suzuki's RE5 was unquestion-

ably a very good motorcycle. It had a pleasant, smooth power delivery and the reliability of its single-rotor mill was such that it could drone across a continent without missing a beat. But it looked strange to us ultra-conservative bikers. Riders didn't like the curious round styling Suzuki chose to bless it with. Riders were wary of the odd shape of the engine and the



The Hercules Wankel was noisy, expensive, not particularly fast and a real vibrator. It bombed after four years.

unknown complication it hinted at. They were leery of a breakdown miles from any Suzuki shop, out where the only bike mechanic around had just gotten the news about overhead valves. Mechanics had to be retrained to service the new machine and many just couldn't come to grips with it. Dealers weren't particularly keen to stock the bike or the complete range of exotic spares it would require. Nobody had particularly asked for the RE5, nobody in particular wanted it and very few people bought one. Maybe if it had been faster than other 500cc bikes, established itself as the performance machine in its class, a breed of rider more concerned with stoplight to stoplight jousting would have made the bike a solid seller and allowed the rotary to evolve and spread its new non-reciprocating religion throughout the land. Maybe. Who knows? The fact is it didn't happen.

WHATEVER HAPPENED TO SEX IN ADVERTISING?

The press release that accompanied this photo from the early Seventies read, "Looks like the Kawasaki 125E and the new Miss Road Atlanta have a lot in common—both very nicely equipped!" Ah, sexism! Ah, bald-faced libido-luring for sales and profit! How much we miss you, you'll never know.



Quoting Kawasaki's 1971 press release: "This year's 'Miss Road Atlanta' is 21-year-old Suzanne Bryan. She is a bank teller and quite a cycle racing enthusiast."

SUPERBIKES AND 1/4-MILES THEN AND NOW

There were no superbikes 12 years ago. There may have been super bikes, but no superbikes (a compound coined, incidentally, to describe the 1969 Kawasaki Mach III). Back in 1967 Cycle World announced that the BSA Spitfire Mk III was the most powerful motorcycle (55.5 horsepower claimed) it had ever tested. It was allegedly the first stock machine to be clocked at 120 mph by a U.S. motorcycle magazine. Its quarter-mile ET was somewhere in the low 14s. Sportsters, Bonneville's and Enfield 750s could give the BSA a run for its money, and a Vincent—if there was one around—might have beaten them all. But not by much.

Every one of these super bikes of the late Sixties turned in decent performance, but they were at their maximum development as designs: they were high-strung and temperamental, and required the best high octane gasoline available. They could never become better than they were.

Then BLOOEIE! Came the rosy fingers of the dawn of the seventh decade lifting over the horizon and we saw unveiled before us in the uncertain light a mighty host of new-generation stormers jousting with the best of those aging iron knights. In early 1970 Cycle magazine conducted the industry's first comparison road test, which left posterity with an interesting set of performance figures. Just for fun let's juxtapose them with the figures of the top seven ET kings Motorcyclist tested as the decade faded into twilight. The comparison tells a lot about how motorcycles got faster and more technically sophisticated over the last 10 years.

1970 PERFORMANCE KINGS

| | |
|---------------------------------------|-----------------|
| Norton Commando ohv 750 twin | 12.69 at 103.68 |
| Triumph Trident ohv 750 triple | 12.78 at 103.92 |
| Kawasaki Mach III 2-stroke 500 triple | 12.81 at 104.40 |
| Harley Sportster ohv 900 V-twin | 12.97 at 102.15 |
| Honda K1 ohc 750 four | 12.98 at 102.27 |
| BSA Rocket 3 ohv 750 triple | 13.14 at 102.15 |
| Suzuki Titan 2-stroke 500 twin | 14.29 at 92.40 |

1979 PERFORMANCE KINGS

| | |
|---|-----------------|
| Kawasaki Z1R-TC dohc 1000 turbo four | 11.30 at 125.00 |
| Honda CBX dohc 4-valve 1000 six | 11.46 at 117.49 |
| Yamaha XS11 dohc 1100 shaft four | 11.73 at 114.79 |
| Suzuki GS1000 dohc 1000 four | 11.75 at 111.43 |
| Kawasaki KZ1300 dohc 1300 water/shaft six | 11.81 at 116.88 |
| Kawasaki KZ1000 Mk II dohc 1000 four | 11.96 at 111.11 |
| Honda CB750F dohc 4-valve 750 four | 12.33 at 108.80 |

As you can see, the slowest bike of today's top seven, the CB750F, is a lot quicker and faster than the best the beginning of the decade could offer. If we add smoothness, reliability, handling, braking, comfort, convenience and a host of other items which have improved over the years, we see that today's motorcycles are light years ahead of what we had just a few short years ago. The old-timers may wax nostalgic while polishing their once-weres, but take it from us, if you're just breaking into motorcycling, you really haven't missed much. The best there's ever been is here now—and there is better stuff on the way.

WHATEVER HAPPENED TO THE CONTINENTALS?

Somewhere along the line Europe blew it. European manufacturers had the know-how and the products to dominate the U.S. motorcycle market in the Seventies. But they shined it on. Didn't care about it. Didn't want to bother. Something. Only BMW is really a viable Continental here in America. The Italians? Guzzi is the only one you can count on as "solidly" in the American market. Then maybe Ducati. But Benelli and Laverda? Marginal at best. How come? Boy, you got us. Fella by the name of McCormack tried to get Laverda, under the name American Eagle, to become a household word over here in the early Seventies. He'd done a lot to make Honda and Suzuki successful. But Laverda. The Latins just didn't

Ten Years After

seem to give a gosh darn about keeping to schedule and making the venture a big success. Sell a few bikes now and again, good enough for them.

Remember MV Agusta, a helicopter company—still one of the biggest and best in the world—that built the winningest series of Grand Prix motorcycles the world has ever seen? Built a line of streeters, too, and sold a handful over here. Bet you never owned one. Remember Kawasaki? Hell, bet you've owned at least one Kwacker sometime, might even own one today. The Big K was an airplane maker that scarcely had a clue as to how to make motorcycles when old MV was stomping all comers into the ground on the race tracks of Europe. Why did they grow fat and sassy selling bikes to us Yanks at the same time MV decided to get out of the motorcycle business?

The whole question of why the Continentals stood around doing little of anything while the Japanese skipped to the bank with cartfulls of greenbacks has got us flummoxed. Back at the beginning of the Seventies, as the British sank under the tide of industrial progress, Italy looked to be entering a new motorcycling Renaissance. Benelli was aboard the multi-cylinder bandwagon in spades with its new six-cylinder and fours coming on line soon after. Ducati unleashed its Desmo V-Twin, Laverda was readying a giant triple. Up north in Germany BMW was making the most radical changes in its flat twins since the 1950s. Names like Kriedler, Van Veen and Koenig promised a new line of super-performance bikes. And of course there were those good dirt bikes, Maico, Husky, CZ, that gave hope of a range of trailer playbikes for the masses in the Seventies.

Didn't happen. And this past decade was really the last chance for the Europeans. The Japanese are so advanced over them now, and so firmly in control of the market place, that motorcycles from east of the Atlantic will never be more than curiosities, despite the best efforts their American distributors may make to turn the picture around. It's sad because the Continentals have, even today, some brilliant machines to attract the enthusiast dollar with. We'll always wonder what could have been—and why it wasn't.

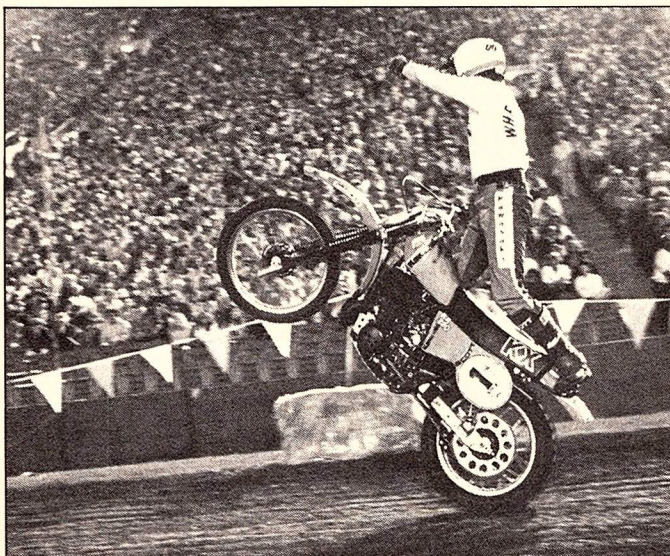
TRAGEDY OF THE DECADE

Cal Rayborn was a special human being and America's best roadracer in the early Seventies. His death was a double shock because of the ironic and unnecessary circumstances surrounding it. He'd gone to Auckland, New Zealand, over Christmas in 1973 to race cars, but after pressure by fans who wanted to see him roadrace a motorcycle, accepted a ride on a 500 Suzuki two-stroke. Shortly after the start of the race, the bike seized and Rayborn hit a wall at 120 mph. He was 33.

FULL SPEED AHEAD AND DAMN THE GVWR



A Harley-Davidson 74 does things to people. Here ten grown men clamber aboard one to save gas while riding to church. They are likely exceeding the bike's GVWR, a new term born in the '70s courtesy of Uncle Sam's safetycrats. It stands for Gross Vehicle Weight Rating, or the total tonnage a machine can "safely" carry, including its own weight. Nobody pays much attention to GVWRs, least of all these ten sinners.



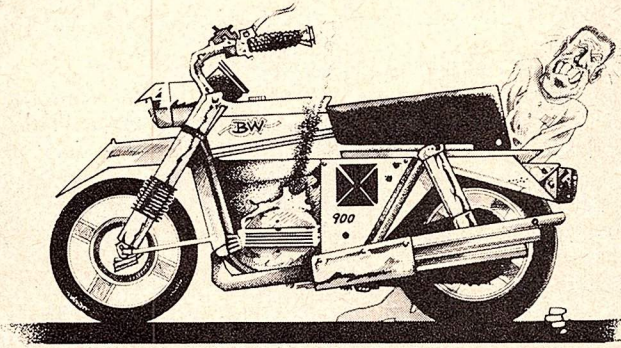
WHO IS THE REAL WHEELIE KING?

Doug Domokos of America is the most amazing wheelie expert we've ever seen. He can ride an entire motocross course on the rear wheel and stand Kawasaki KZ1300s nearly vertical.



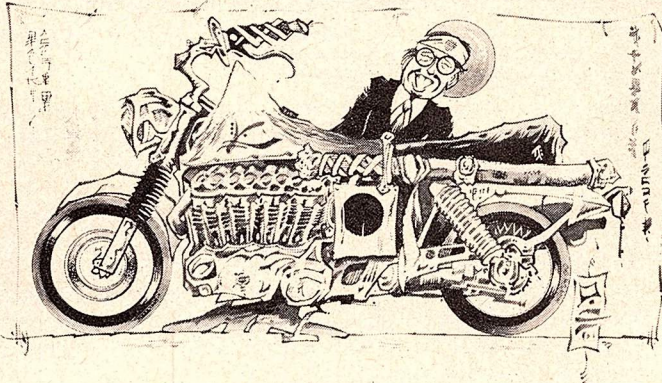
But he's got a formidable challenger in Finland's Arto Nyqvist, who can allegedly wheelie through the 1/4-mile in 13 seconds while riding backwards. We'll still pick Domokos.

FIVE WE'RE GLAD WE DIDN'T SEE—OR DID WE?



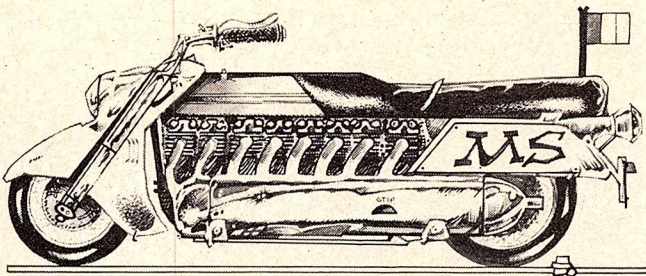
1. THE BOXWORTH-HEAVY 900

This 900cc single never made it past the prototype stage when the three-foot long anodized polycarbonate exhaust valve pushrod let go and erupted through the valve cover like a new-launched Minuteman missile, gelding inventor Boxworth. Senior design consultant Roscoe Heavy theorized after the mishap that the super long-stroke (189.34mm) "for torque" of the motor may have been a "contributory causal factor" in the failure of the design.



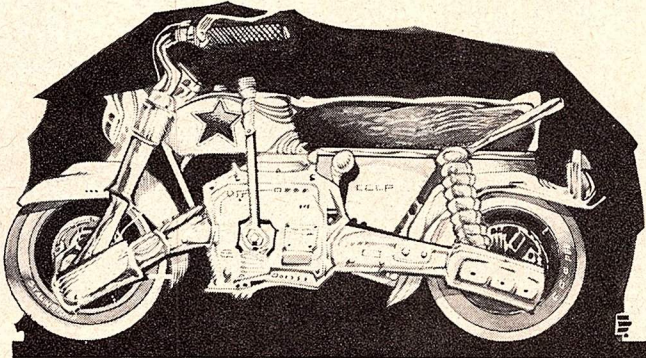
2. THE KUSOKURAE V8 50

The 50cc V8 Kusokurae was hailed as the most innovative motorcycle of the century when it was introduced in the fall of 1971. It had 17 overhead camshafts of high-tensile neoprene activating 93 cast Styrofoam valves. At the 24 Hour Grand Prix d'Endurance of Truck Island, Marianas Trust Territory, the Kusokurae finished second behind the only other entry in the race, a tricycle made of scrap recovered from the hulk of the sunken troop transport Chimbotsu. After the race, the marque's inventor reportedly lifted a leg over the prototype and then hurled it into the lagoon, where it floated for some hours before it was eaten by a small crustacean.



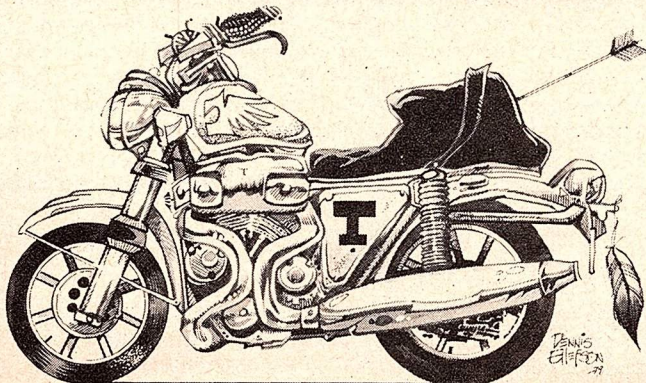
3. THE MOTO SCAMPINI 350

This in-line eight with shaft-driven desmo double-overhead cams was originally introduced as a two-stroke, but EPA regulations prodded management as MS into bolting on a new head. When queried by the Eurojournals over the feasibility of the arrangement the president of the company, which makes most of its money manufacturing umbrella hats, shrugged his shoulders and said, "Eh!" Seven hundred examples were exported to the United States, where six were sold to gentlemen who had taken sacred vows never to buy anything not built by white men.



4. THE SZS MACH SCHNELL

The SZS boasted two-wheel hydraulic drive and 75 layers of finest tempera paint on its gas tank. The OEM two-stroke single powering the machine ran a hydraulic pump which sent fluid to both the front and rear wheels where tiny double-acting pistons reciprocated a lever which activated a cam, thus spinning the wheels. Top speed was reported to be five miles an hour, but this maximum became theoretical when the first production model's enormous torque rotated East Berlin into the western zone, spurring Soviet tanks to make a protective excursion into the west to retrieve the city, raze the SZS factory and impound all examples of the Mach Schnell.



5. THE AMERICAN TURKEY

Ballyhooed as "The Only Motorcycle A Man Will Ride If He's Really Got 'Em," the American Turkey sold well for several years until a naive purchaser actually tried to start one and discovered the motor was a solid lead casting. This discovery would not have hurt the firm's image significantly, but the naive purchaser also discovered tiny letters stamped into the base of the 2500cc cylinder block that said, "Made in Hong Kong." That was the death blow.

RACE BIKES OF THE DECADE

CO-WINNER: YAMAHA TZ750

Yamaha's TZ700/750, a four-cylinder, liquid-cooled, two-stroke wonder, captured its very first important start, the 1974 Daytona 200, and has never looked back. Every Daytona since has been won by one, as well as every World Formula 750 championship and every American National but one. The mighty engine has found its way into sidecars and Bonneville streamliners. Only rules legislation or a Yamaha decision to cease selling the TZ750 will stop its winning: no other manufacturer seems interested in building a challenger.

CO-WINNER: H-D XR750

Today it's unusual to go to a Mile or half-mile National and find anything but Harley-Davidson XR750s. But in 1969 you couldn't have found any because the design had not yet been invented. The aluminum alloy V-twin, an overhead valve powerplant to replace the ancient flathead KR, went through a surprisingly short development period, appearing for the first time in 1972 and winning the Grand National championship that year. Along with the Yamaha TZ750, it is the most winning race engine of the Seventies. Nineteen different riders have won U.S. Nationals with this remarkable machine.

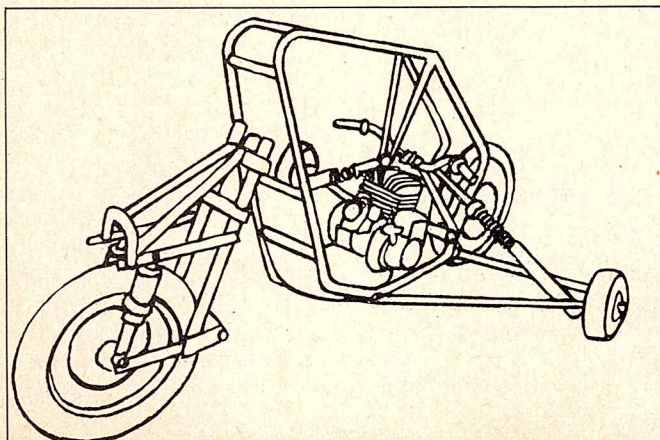
THEY COST MORE THAN CARS SYNDROME

Motorcycles used to be cheap. You could tell the old lady you'd be saving money by buying a two-wheeler. No more. In 1972 BMW broke the \$3000 barrier with its R90S, a machine many folks swore would be just too expensive to sell—and never mind about full dress Harleys; they didn't count. Or so the reasoning went. Since then motorcycle prices have skyrocketed. A new BMW for three grand would be a steal. You'll pay four, five, even six gees for a classy touring scooter these days. And even dirt bikes aren't cheap. The \$2000 barrier was broken in 1977 by the KTM 400. The way things are going it won't be long before you'll pay \$3000 for a helmet, and count it cheap at the price.

OUTSTANDING ACHIEVEMENTS

1. SENATOR WILLIAM PROXMIRE

The good senator from Wisconsin had the insight to give his famous and much publicized Golden Fleece Award to Joan Claybrook's ridiculous Backwards Bike. While baring the facts in the NHTSA's \$120,000 boondoggle financed by our taxes, Proxmire peppered his report with statements such as:



"The bureaucrats gave the taxpayers a bum steer on this one."

"This is the ultimate example of the taxpayer being taken for a ride."

"In the bureau's view, if it was backward, it had to be right."

2. HARLEY-DAVIDSON ENCLOSED CHAIN

For years the motorcycle press has endorsed the convenience of shaft drive, but hated its extra weight, expense, complication and ill effects on handling. Why not just enclose drive chains to eliminate their problems of flinging oil, and needing frequent adjustment and lubrication? Nobody listened. Then the 1980 FLH came out with an enclosed chain. Thank you Harley-Davidson.

3. THE ISDT IN AMERICA

One of the great logistical challenges in motorcycling is to host the ISDT. In 1973 Al Eames and the AMA did it, with help from the New England Trail Riders in their home environment of the Berkshires in Massachusetts. It was a successful event which all the 300 riders enjoyed.

4. EQUAL REPRESENTATION

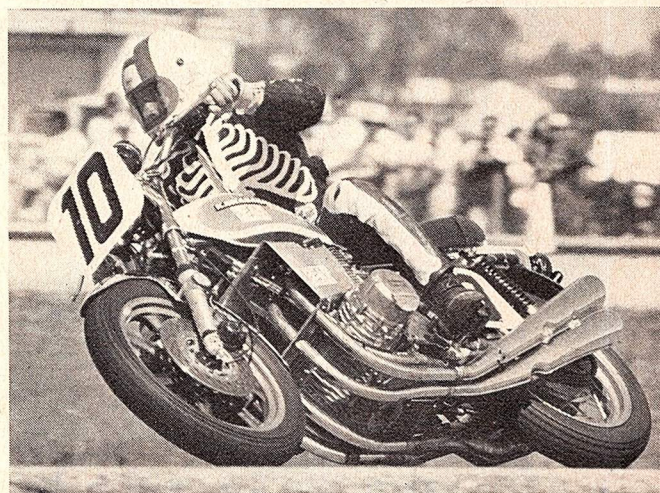
Under Russ March the AMA finally gave Class A members (you and your friends) representation on the Board of Directors after they had had none for 49 years.

5. ST. JOAN OF CLAYMORE

Cook Neilson wrote what has to be the best editorial in motorcycle journalism when he introduced Joan Claybrook and her methods to the reading public in 1978. He christened her St. Joan of Claymore after "a particularly depressing military antipersonnel device because if you stumbled haphazardly into either one of them they'd take you off at the knees without so much as a how-do-you-do."

6. DAVE ALDANA'S SKELETON LEATHERS

"Rubber Ball" Aldana, half of the Team Mexican juggernaut, added more spice to his colorful career by commissioning Bates leathers to turn him into a skeleton.



7. THE HURT REPORT

Though some may question his methodology or motives, Prof. Harry Hurt and his three-year \$375,000 report examining hundreds of motorcycle accidents and its subsequent publicity has put motorcycle safety in the forefront of many minds which had ignored it before. If nothing else he taught us a new word, conspicuity, which will, if practiced, save lives.

8. NOLAN HELMET ADS

Too bad they appear only in European papers and magazines.

9. "I'LL BUILD MY OWN"

In the Seventies Ken Maely, Steve Pick and Bill Kennedy all built their own racing motors—from scratch.

10. THE COLLECTORS

Doug Mellor's photo essay of four eccentric motorcycle collectors (Motorcyclist, September 1979) took six years to shoot and records for posterity one of the most bizarre slices of life in this or any other decade.

11. GREY ADVERTISING

The immense Honda advertising account (some \$10 million per year) was handled by Grey for 16 long years, nearly a record in the ad business. Dailey & Associates took over the account in 1979 and now they get to fight the lawyers who won't let Honda publicize any performance figures over 55 mph. How do you sell a CBX when they won't let you get it out of first gear?

12. COMPARISON TESTS

The comparison test in motorcycle magazines was invented simultaneously in 1970 by Cycle with their Big Seven Shoot-out and by Petersen's Motorcycle Buyer's Guide, which compared nine muscle bikes on the Axtell dyno. Comparison tests were a major step ahead for motorcycle journalism because they are the most effective way to help readers become educated buyers.



The biggest comparison test in history was conducted by Motorcyclist in July of 1973—10 touring bikes, 30 pages.

SAFETY RELATED INNOVATIONS

The 1970s saw many products and features aimed at making motorcycling safer. The following is a list of the best of those with the companies that introduced them or put them into production.

1. Safety rims (Harley-Davidson)
2. Disc brakes (Harley-Davidson, Honda)
3. Tubeless tires (Honda)
4. Quartz lights (BMW)
5. Dual-bulb taillights (Suzuki, Yamaha)
6. Running lights in turn signals (Honda)
7. Loud horns (BMW, Laverda, Harley-Davidson)
8. Self-canceling turn signals (Yamaha)
9. Plastic motocross boots (Scott)
10. Full-face helmets (Bell)

PARTS PRICES 1969-1979

To give you an idea of the increase in retail pricing over the past decade, we have compiled a price list of random parts for a few popular models. We also found that over the years, flat-rates

(the allotted time a shop may charge for a specific service) have remained basically the same. Labor costs, however, have inflated from an average \$12 per hour in '69 to \$23, and even as much as \$30 an hour in some areas today, such as San Francisco.

| BMW 600 | 1969 | 1979 |
|----------------|----------|----------|
| Purchase price | \$1548 | \$3370 |
| Piston set | \$37.90 | \$160.00 |
| Brake shoes | \$ 7.45 | \$ 21.95 |
| Handlebars | \$ 8.95 | \$ 25.00 |
| Gas tank | \$87.00 | \$250.00 |
| Battery | \$12.00 | \$ 49.00 |
| H-D SPORTSTER | 1969 | 1979 |
| Purchase price | \$1840 | \$3610 |
| Piston set | \$37.30 | \$ 77.00 |
| Chain | \$10.35 | \$ 24.95 |
| Handlebars | \$28.20 | \$ 25.00 |
| Gas tank | \$65.35 | \$104.10 |
| Battery | \$24.00 | \$ 39.25 |
| HONDA CB750 | 1969 | 1979 |
| Purchase price | \$1450 | \$2598 |
| Piston set | \$ 74.00 | \$ 85.60 |
| Chain | \$ 54.80 | \$ 65.60 |
| Handlebars | \$ 18.30 | \$ 20.00 |
| Gas tank | \$138.90 | \$175.60 |
| Battery | \$ 39.69 | \$ 38.01 |
| YAMAHA XS650 | 1969 | 1979 |
| Purchase price | \$1245 | \$2198 |
| Piston set | \$27.88 | \$ 56.66 |
| Chain | \$24.00 | \$ 46.10 |
| Handlebars | \$ 8.79 | \$ 16.99 |
| Gas tank | \$54.00 | \$127.84 |
| Battery | \$ 6.74 | \$ 46.99 |

MAXIMUMS OF THE DECADE

A List Of Mosts, Bests and Worsts

Fastest Motorcycle of the Decade: Kawasaki Z1-R Turbo
 Most Awe-Inspiring Motorcycle of the Decade: Honda CBX
 Most Complicated Motorcycle: Kawasaki KZ1300
 Most Spectacular Motorcycle of the Decade: Kawasaki KZ1300
 Most Desirable Motorcycle of the Decade: Kawasaki Z-1
 Most Beautiful Motorcycle of the Decade: Norton Commando
 Most Clever Motorcycle of the Decade: Honda CX500
 Best Performing Motorcycle of the Decade: Suzuki GS1000
 Most Durable Motorcycle of the Decade: Honda Gold Wing
 Best Mountain Scratcher of the Decade: Honda CB750F
 Best Cruising Bike of the Decade: Harley Low Rider
 Best Value-for-money of the Decade: Suzuki T500
 Neatest Bike of the Decade: Yamaha SR500/Honda XL500
 Most Unchanged Motorcycle of the Decade: H-D FLH 74
 Best Named Motorcycle of the Decade: Hodaka Dirt Squirt
 Sweetest-sounding Motorcycle of the Decade: A 74 at idle
 Dullest Motorcycle of the Decade: Honda CB750 Automatic
 Wimpiest Motorcycle of the Decade: Honda CM185T TwinStar
 Best Might-have-been of the Decade: BSA/Triumph 350 twins
 Best Nice Try of the Decade: Suzuki RE5 Rotary
 Most Boring Motorcycle of the Decade: Jawa 250 Californian
 Dumbest Motorcycle of the Decade: Evel Knievel Skycycle
 Worst Engineered Bike: The Gina from Argentina
 Ugliest Motorcycle of the Decade: H-D Sprint/CX500 Custom
 Real Pig of the Decade: Munch Mammoth
 Most Regretfully Lost Bike of the Decade: Triumph Trident
 Simplest Motorcycle of the Decade: Bultaco Metralla
 Most Unreliable Motorcycle of the Decade: Yamaha TX750
 Most Expensive Motorcycle of the Decade: BMW R100RT
 Best Indicator of Things to Come: Honda NR500
 Heaviest Motorcycle of the Decade: H-D FLH (777 lbs.)
 Most Invisible Bike of the Decade: Any Ammex
MOST UNPRODUCTIVE EXPANSION OF ENERGY
 In 1976 Gary Scott, via the claiming rule, took possession of Rex Beauchamp's Harley-Davidson and Kenny Roberts' Yamaha; slugged Harley-Davidson's Bill Werner and Yamaha's Kel

Ten Years After

Carruthers; raced like a fiend and still lost the Grand National Championship to Jay Springsteen.

WACKIEST MOMENT OF THE DECADE

Gene Romero getting caught submitting a counterfeit medical release to the AMA that was signed by a gynecologist (1971).

MOST EMBARRASSING MOMENT OF THE DECADE

Rick Sieman, Editor of Dirt Bike, was at the Superbowl of Motocross with all his magazine colleagues for a press day which involved riding the course. No one would jump one particularly wide chasm, not even some of the pros there practicing. But right in front of everyone, Rick tried. And didn't make it. They hauled him to the hospital where he soon recovered and it took several hours to repair the huge dent in the track.

FIRST AMERICAN GP WINNER

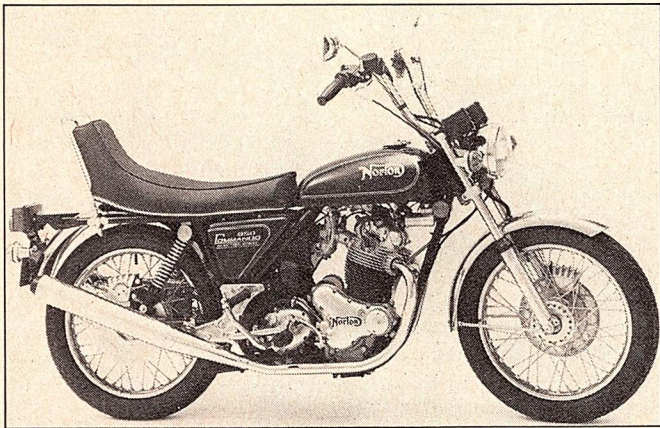
One of the best individual efforts of the decade came in 1974 when Jim Pomeroy of Yakima, Washington, was the first American to win a round in genuine FIM GP competition. It happened in Spain on a Bultaco in a 250 motocross world championship.

ONE OF THE WORST MAGAZINE GOOFS

In Ten Years After last month, Motorcyclist had a category called The Decade's Most Impressive Racing Achievements. In it we forgot to mention what is probably the most incredible racing achievement of all time, that of Kenny Roberts winning a National in all five types of racing—shorttrack, half-mile, Mile, TT and Roadrace—in one season. This amazing 1974 grand slam will probably never be equaled again.

FACTORY PSEUDO-CHOPPERS: THE "SPECIALS"

First it was the Kawasaki LTD (1975), then the Yamaha Specials (1978) and finally the Honda Customs and the Suzuki Low Slingers (1979): styling for smiling had found its niche in motorcycling. And a big niche it was, with dealers reporting sales of 10 to 1 in favor of the bare-backed, low-cut, slit-skirted Oriental dolls over their wading-the-rice-paddies trousered plain-jane workaday sisters. Call it soft-core Harley, the equiva-



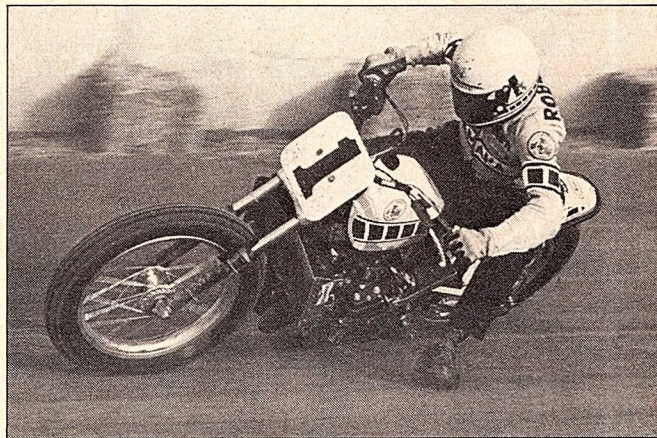
Factory specials are no invention of the Japanese. Norton began building this Hi Rider for the U.S. market in 1971.

lent of fake holes in the fender of a Buick—or a daring styling breakthrough that has re-energized a stagnating industry, the factory pseudo-chopper specials are the staggeringly successful disco music of motorcycling, the street scrambler phenomenon of the Seventies. However you may feel about the new breed of bike cosmetics, the style has broken out of the

beach head, pulverizing purist pillboxes in the process, and is now enveloping the streets of America in multi-division strength as crowds of profilers and cruisers shout and cheer from every taco and burger stand in the land.

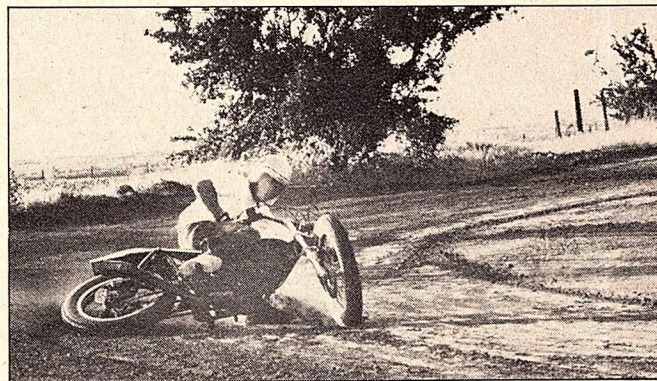
SOME OF KENNY ROBERTS' RACING ACHIEVEMENTS

1. Became Grand National Champion in 1973.
2. Scored a grand slam of all five types of racing events (Mile, half-mile, shorttrack, TT, roadrace) in 1974.
3. Became, with a record number of points (2286) Grand National Champion for the second consecutive year in 1974.



Some say Kenny Roberts' most impressive achievement was winning the 1975 Indy Mile aboard the awesome TZ750 flat tracker. He is unquestionably the Racer of the Decade.

4. Became American motorcycle racing's first millionaire in 1976.
5. Became America's first 500cc GP World Champion in 1978.
6. Recovered from a serious crash in Japan to repeat as World Champion in 1979.
7. Won his 25th National, a roadrace at Sears Point, in 1979.



This is probably the only photo of an actual full-lock slide you will ever see. The rider is Kenny Roberts, playing with his TT bike on a homemade track near his home. He made dozens of passes just like this for Art Friedman's camera.

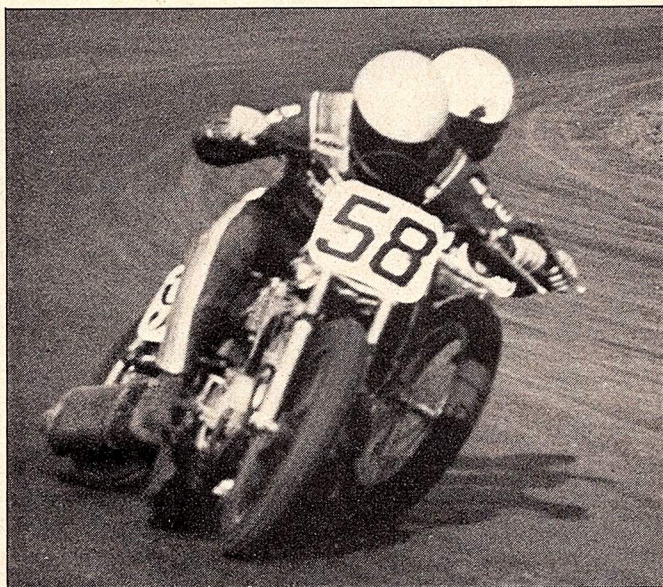
8. Started his own World Series of Racing in 1979.
9. Injected excitement and drama into every race he entered (1970-1979).
10. Was the only rider to win a Mile on a two-stroke.

MOTORCYCLE MILLIONAIRES

Millionaires are a secretive lot in general, so the following list is mostly educated guessing on our part. It is also far from complete. We don't include millionaires who ride motorcycles but make their money in other businesses, such as Steve

McQueen, Zach Reynolds, Malcolm Forbes, Otis Chandler, A.J. Foyt, etc. The hard workers below earned their six-figure net worth during the Seventies from the motorcycle industry itself. Only a few people in the world, such as Mr. Soichiro Honda and The Davidson Family were genuine motorcycle millionaires prior to the 1970s.

1. Kenny Roberts, racer
2. Barry Sheene, racer
3. J.R. Kelly, distributor (Ohio)
4. Craig Vetter, fairings (Illinois)
5. Tom Rudd, Drag Specialties (Minnesota)
6. Rick Case, Midwest Honda dealer
7. Rick Talbot, Los Angeles Harley dealer
8. Dillard Coleman, largest U.S. dealer (Virginia)
9. Russ Collins, speed equipment (Los Angeles, CA)
10. Malcolm Smith, dealer and distributor (Riverside, CA)
11. Mike Goodwin, race promotions (Laguna Beach, CA)
12. John Penton, he has at least \$1 million in enduro trophies



PURT NEAR OF THE DECADE

"Purt near" is short for "pretty near ate it." This kiss on the San Jose Mile couldn't be closer without being a disaster.



BOUNCING BOB

For 11 years Bob Malley has been the starter at West Coast AMA Nationals. He delights fans by bouncing down the straights doing handstands, flips and cartwheels. He gets some travel money from the AMA, but mostly it's been a decade-long labor of love. Malley, an ex-racer, lives in Tacoma, Washington.

TEN OUTSTANDING MOTORCYCLES OF THE DECADE

1. Suzuki GS1000

Superb handling, excellent power, splendid reliability, terrific comfort. What more can we say? It's the bike without a flaw.

2. Honda CB750F DOHC

A four-valve per cylinder four that runs like a Rolex watch, is wickedly fast and a joy in the corners. It's all we hoped for from Honda as a replacement for the original CB750.

3. Kawasaki KZ650

The KZ put the 650 category back on the map as a performance class and faked out the insurance company premium adjusters in the process.

4. Yamaha SR500

The Yammie revived the street-going big single, introducing an entire generation to the joys of a light, torquey motor in a solid handling package you could tune yourself.

5. Ducati GT750

In its brief life the 750 was admired by every rider who liked to ride hard on twisty roads. "Handles like a Ducati," was the best compliment any other motorcycle could receive.

6. Yamaha XS Eleven

The Eleven has its weak points, but touring isn't one of them. It has one of the very best motors ever built.

7. Honda CX500

The CX boasts outstanding technical credentials tied to a good-handling, comfortable, quiet package at home on the interstate, the boulevard or the mountain passes.

8. Honda XL500

The XL is one of the few dual-purpose bikes that does everything exceptionally well. It's definitely the most versatile and probably the most fun motorcycle of the decade.

9. Suzuki RM250

This was the first of the Japanese long-travel MXers that really worked and it has been consistently good ever since.

10. Penton/KTM 175

If a neophyte wondered about the difference between a European dirt bike and a Japanese dirt bike, you let him ride a Penton; then he understood.

RACING ACHIEVERS BEHIND THE SCENES

1. DICK O'BRIEN

Harley-Davidson's affable but all-business factory team boss saw his bikes and boys bag 73 wins out of 273 Nationals and six No. 1 plates. He is perhaps the most respected figure in flat-track racing today. And the only racing manager from any of the factories to keep his job throughout the decade.

2. RON WOOD

The outnumbered, but never outwitted owner/tuner of the loneliest and most attractive Norton in racing, spent eight years waiting for his first National score before Alex Jorgensen got it for him in 1978. He enhances flat-track racing with his presence. Racing could use another hundred like him.

3. MARIO ZANOTTI

Mathematics is his trade, racing is his play. Anyone who works with numbers should realize the impossible odds of a privateer team beating a factory one to the National championship. But Zanotti's, with Steve Eklund up, did so to Harley-Davidson in 1979.

4. BILL WERNER

Contrary to popular belief, Carroll Resweber is not Grand National racing's only four-seasons-in-a-row titlist. Harley-Davidson's hard-working Werner has four mechanic's titles to his credit; one with Gary Scott (who subsequently beat Werner up for his trouble) and three with Jay Springsteen.

5. KEL CARRUTHERS

He put on, early in the decade, some of the best road duels of the Seventies with Cal Rayborn and, particularly, Dick Mann. Then the Australian, a former world 250cc champion, was the tutor and mechanic who got Kenny Roberts running

Ten Years After

fast on pavement. As the decade ended, Carruthers' mechanical touch made Roberts' Yamahas roar to two championships.

6. KEITH McCARTY

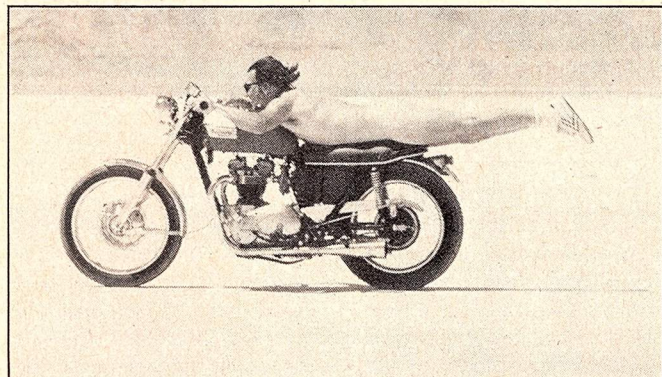
The young, dedicated Californian emerged as the motocross tuner of champions. First he prepared the Suzukis that got Tony DiStefano two 250cc National titles, and then the Yamahas that Bob Hannah hurtled to all his 250, Supercross, Trans-AM and other championships.

7. ERV KANEMOTO

Gary Nixon called him "the greatest tuner in the world." With ample reason. Kanemoto's hard work and genius and loyalty in the face of all of Nixon's awful luck and accidents made Nixon the top roadracer in 1973 and almost the world's top Formula 750 pilot in 1976. Kanemoto-inspired mechanical touches are now showing up on most roadrace bikes.

8. BYRON HINES

The quiet, extremely modest Mr. Hines has worked behind the scenes at R.C. Engineering for most of the decade in the design and fabrication of such famous dragsters as: the Atchison/Topeka and Santa Fe Honda triple; Terry Vance's B-Gas Honda double; the incredible V-8 Sorcerer, which has gone 199 mph; the Kawasaki and Suzuki Pro Stockers which carried Vance to four national titles; and, finally, the far-out Battlestar funnybike on this month's cover. The total output of these six machines is 1700 horsepower!

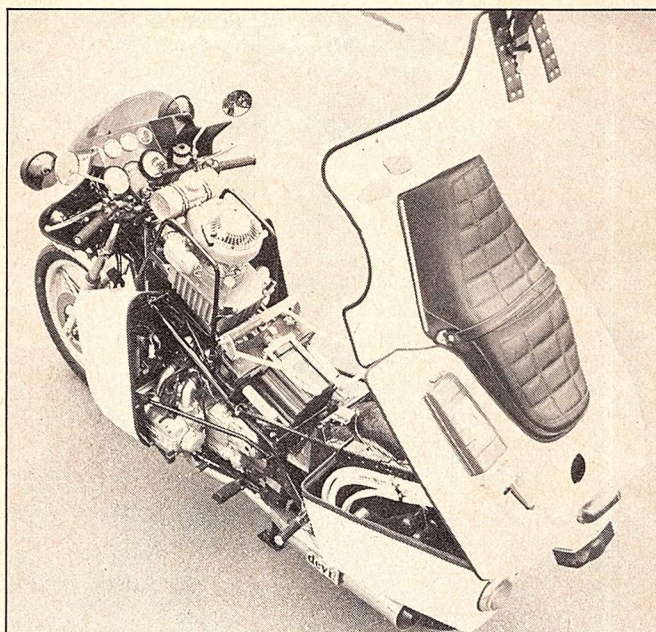


STREAKING

Streaking came and went like a flash in the early Seventies. It was a crazy, show-off, fad thing to do, like swallowing goldfish, flagpole sitting or Volkswagen stuffing. And of course people streaked on bikes. The fellow in the picture is doing his Freudian thing on a Triumph at the Salt Flats.

THE MOTO-MOTORHOME, 1977

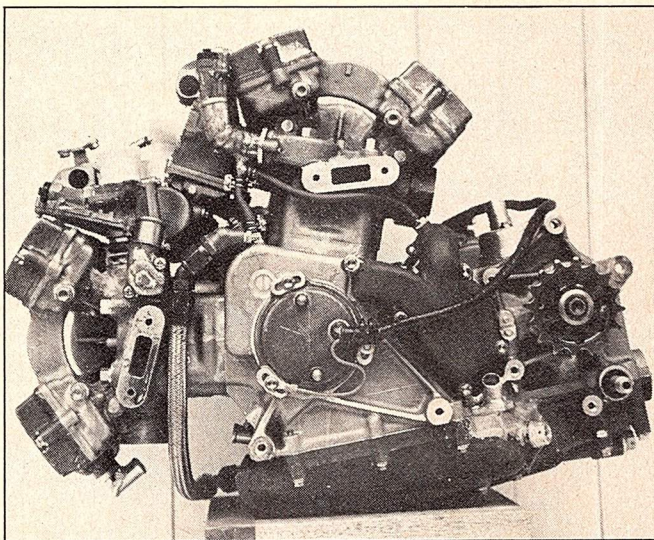
What, for many tourers, could have been the crowning achievement of the decade was the Wobblebago "El Gordo" Mk. I, the world's first two-wheeled motorhome. Based on a Honda GL1000, the El Gordo slept four on the air beds which folded out of the right saddlebag. The left saddlebag doubled as a sink. The hole in the plastic shell behind the seat led to Mr. Wobblebago's favorite innovation, the "Tour Toy-let." A shower head plugged into the cover in front of the seat to let the user bathe when the seat was in the upright position. (A shower curtain was optional.) The seat was filled with water instead of foam, and to get warm water this was pumped through the engine like coolant. The huge generator provided power for the El Gordo's refrigerator-freezer (not visible here to the right of the engine), food processor (to the left of the engine), three-inch round-screen TV (above the instruments) and the self-leveling centerstands. The black objects in front of the fairing are a radar detector and electronic counter-



measures jammer to help the rider cruise undisturbed. Unfortunately, as the first prototype was being rushed to completion for a combination Rider/Motorhome Life road test, Mr. Wobblebago realized one oversight. There was no gas tank. A 1.2-gallon tank was installed in front of the generator. With the generator running, that gave the machine a range of 9.7 miles, not quite enough to reach the nearest gas station. While pushing the juggernaut the last half-mile, Wobblebago suffered a heart attack and the project was abandoned.

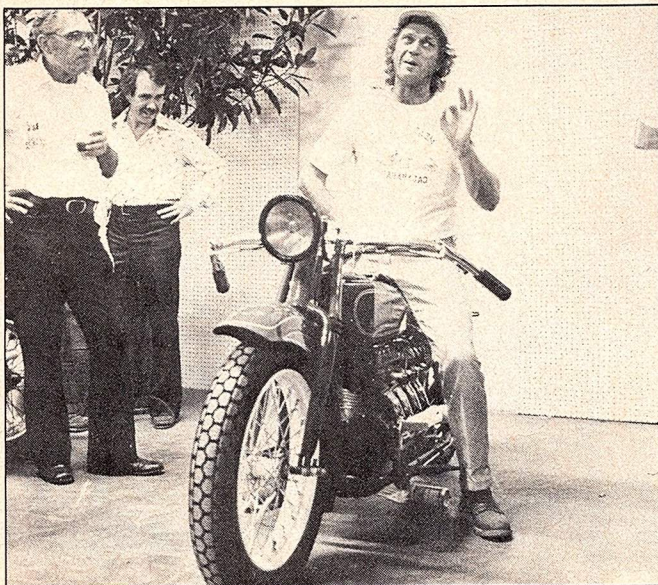
SPECIAL MENTION: THE HONDA NR500

The NR500 deserves special praise as the innovator of the decade, even though it is a specialized Grand Prix race bike, none of the features of which has yet made its way onto production hardware. But rest assured, they will. Eight valves per cylinder. Elipsoid cylinders, two connecting rods per piston, and goodness—and Honda—knows what other neat stuff. Whatever the feds do to us regulation-wise, as long as they let



The raw, machine look of the NR500 is caviar to anyone who loves technology. Kenny Roberts says it makes plenty of power.

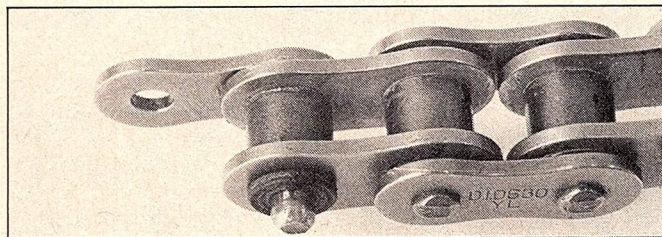
us keep riding bikes, the technology being put to the test on the NR500 will ensure that we will have exciting, high-performance capable machinery in 1989 that will be just as far advanced over 1979 offerings as the '79s are over what we had in 1969. It's a comforting thought.



MOST SATISFIED PURCHASER

Steve McQueen went to an antique motorcycle auction in Los Angeles last year and bought the prize of the day, a 1926 Ace four in fully restored condition. The owner wanted \$11,000 but McQueen's high bid was \$8600, a steal which obviously made him very happy. At the same auction McQueen spent \$2100 on an old Sunbeam for his growing collection.

ADMIRABLE TECHNOLOGY POPULARIZED IN THE SEVENTIES



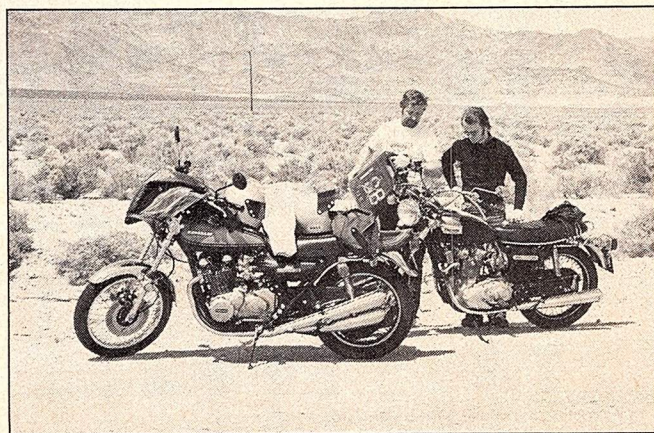
Few technical innovations of the decade can match the X-ring chain in importance. With this D.I.D., who needs a shaft?

- | | |
|-----------------------------|--|
| 1. Disc brakes | 18. Right-angle throttles |
| 2. Automatic transmissions | 19. Air forks |
| 3. Shaft drive | 20. Gas shocks |
| 4. Multi-cylinder engines | 21. Locking gas caps |
| 5. Quiet mufflers | 22. Multi-fuse electrics |
| 6. Four-valve heads | 23. Vacuum petcocks |
| 7. Three-valve heads | 24. Reversible keys |
| 8. Liquid cooling | 25. O-ring chains |
| 9. Electronic ignitions | 26. Huge taillights |
| 10. Self-canceling blinkers | 27. Fuel gauges |
| 11. Quartz headlights | 28. Idiot lights |
| 12. Really good tires | 29. Two-strokes which don't foul plugs |
| 13. Long-travel suspension | 30. Engine balancers |
| 14. Electric starters | 31. Folding levers |
| 15. Ignition key fork locks | 32. Rubber mounting |
| 16. Cast wheels | 33. Halter tops |
| 17. Dog-leg levers | |

TECHNOLOGY WE NEED IN THE 1980s

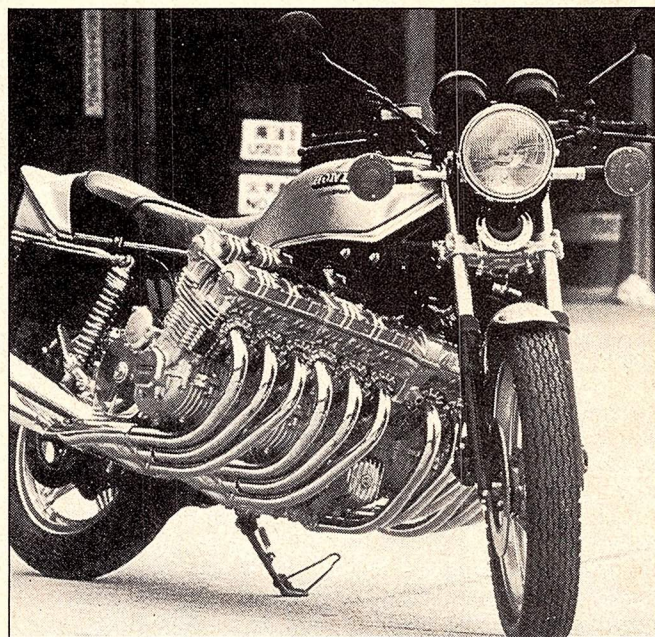
1. Louder horns
2. More gas capacity
3. Pipes which don't blue
4. More ground clearance

5. Non-squeak disc brakes
6. Effective braking in rain
7. Effective anti-theft devices
8. Tapered-roller swingarm pivots
9. Accurate rear wheel alignment marks



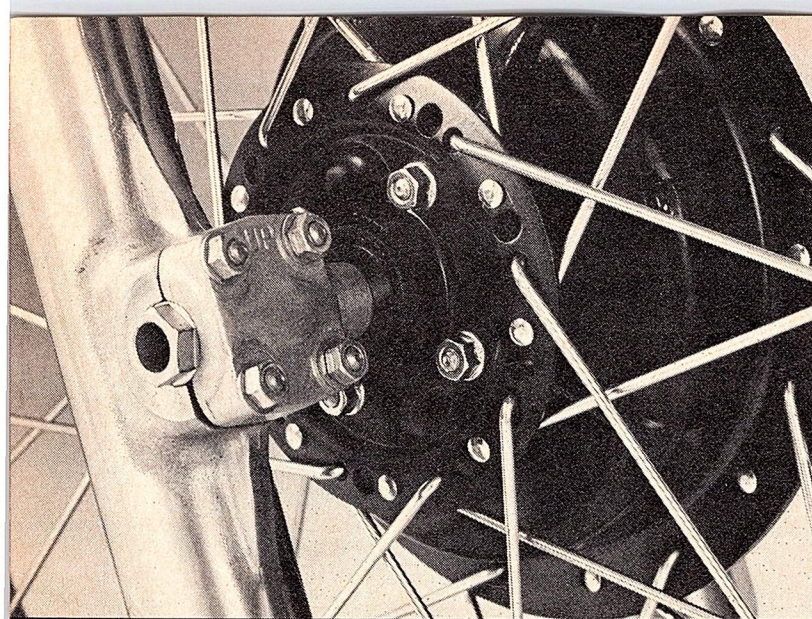
This will be the story of the Eighties if manufacturers and accessory companies don't start building bigger gas tanks.

10. Good locations for hooking bungees and tie-downs
11. A 90-degree sporting V-twin from Japan
12. Lots of young blonde trophy girls
13. Tubeless tire patching kits
14. Centerstands for trail bikes
15. Someone to answer the phone at Bultaco
16. Waterproof Scott boots
17. Ladders to climb aboard motocrossers
18. 21-inch front wheels on Honda XLs and XRs
19. Toolboxes that you can get the tools back into



TEN YEARS FROM NOW

If the death of the simple motorcycle and the birth of reliability was the Janus-faced phoenix of motorcycle technology this last decade, what will the next ten years bring? Well, the photograph above may give you a clue. It was rushed to us from Europe by jet courier. From France, to be exact, home of endurance racing cutting-edge technology. Secret technology. The lad who Minoxed this unauthorized snap was later found face down in an abandoned pillbox on the Maginot line, stabbed through the gills, a duralumin pushrod driven square into his gizzard. So we won't tell you any more about the bike in this photograph. Or the future. It's secret. But it's better than what we've got now. You can bet on it. Welcome to the eighth decade.



You got yer Peterbults, yer Harleys and yer Budwieser. Amurican products, made by good old God-fearing, tax paying Amuricans. Lotta people don't take kindly to no furrin products. Nosiree.

Better add another item to the list of "Good Old American Products": Honda motorcycles. That's right, them little subversive inflation-causing economy-wrecking two-wheelers. Don't worry, they're not about to take over just yet. Right now Honda is only building two models in their new Ohio plant, the CBX and the CR250R, two examples of ancient American maxims. The CBX is a sterling example of the more-is-better philosophy. And the CR250 is designed to be a world-beater—something we Americans like to think of ourselves as. These two scooters fit in with the American life style so well, it's sad to remember they were designed in Japan.

You street bike buffs can quit reading right now, because we're not going to weigh the relative virtues of Sportsters versus CBXs. We'll side-step the whole issue and only concern ourselves with the CR250R—the first really competitive production motocross bike ever built in the United States.

For those of you who simply like good motorcycles no matter where they're built, there's no need to worry. Honda hasn't switched to cast iron instead of aluminum in an effort to Americanize their motorcycle. And it's not painted white and blue along with the red, either. The CR was designed in Japan, where the motor is assembled and assorted chassis parts are manufactured. The frame is fabricated over here and the wheels are assembled with Japanese parts in the Ohio factory. The seat, rear fender and air box are made by American vendors.

With the move to the U.S., Honda has broken with tradition in a number of ways. One new policy seems to be that of staying on top of motocross advancements. Years ago, when Honda first came out with their two-stroke racers, they were content to let them stagnate for seasons at a time. Considering the constant advancements in motocross technology, this made the old CRs obsolete in short order. Last year, Honda finally got around to performing a thorough redesign on the bikes. But unlike in the past, Honda hasn't left the CRs unchanged this year. Instead of lagging behind in motocross technology, the Big H has apparently decided to set the pace and the heavily redesigned 1980 CR250R is proof.

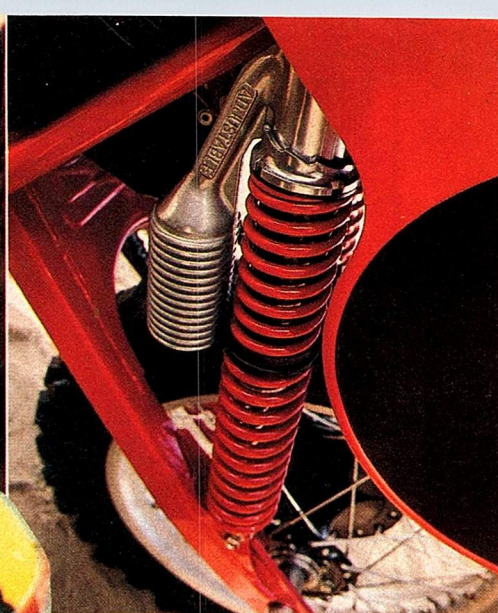
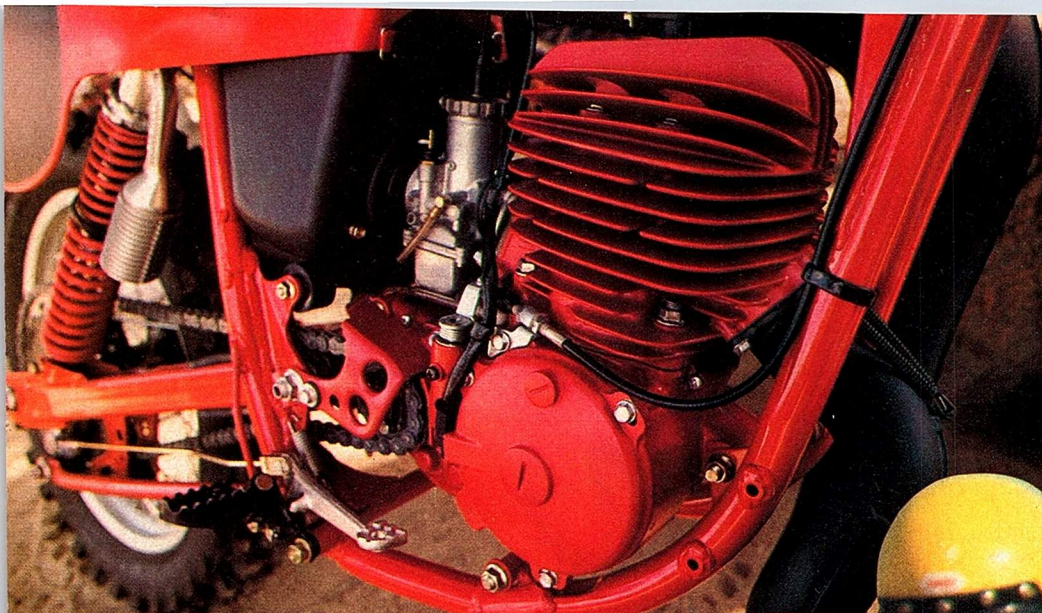
Honda engineers were basically happy with last year's CR250R, with the exception of some suspension shortcomings. As later testing on the factory race bikes proved, the cause for the rear suspension's weakness

HONDA CR250

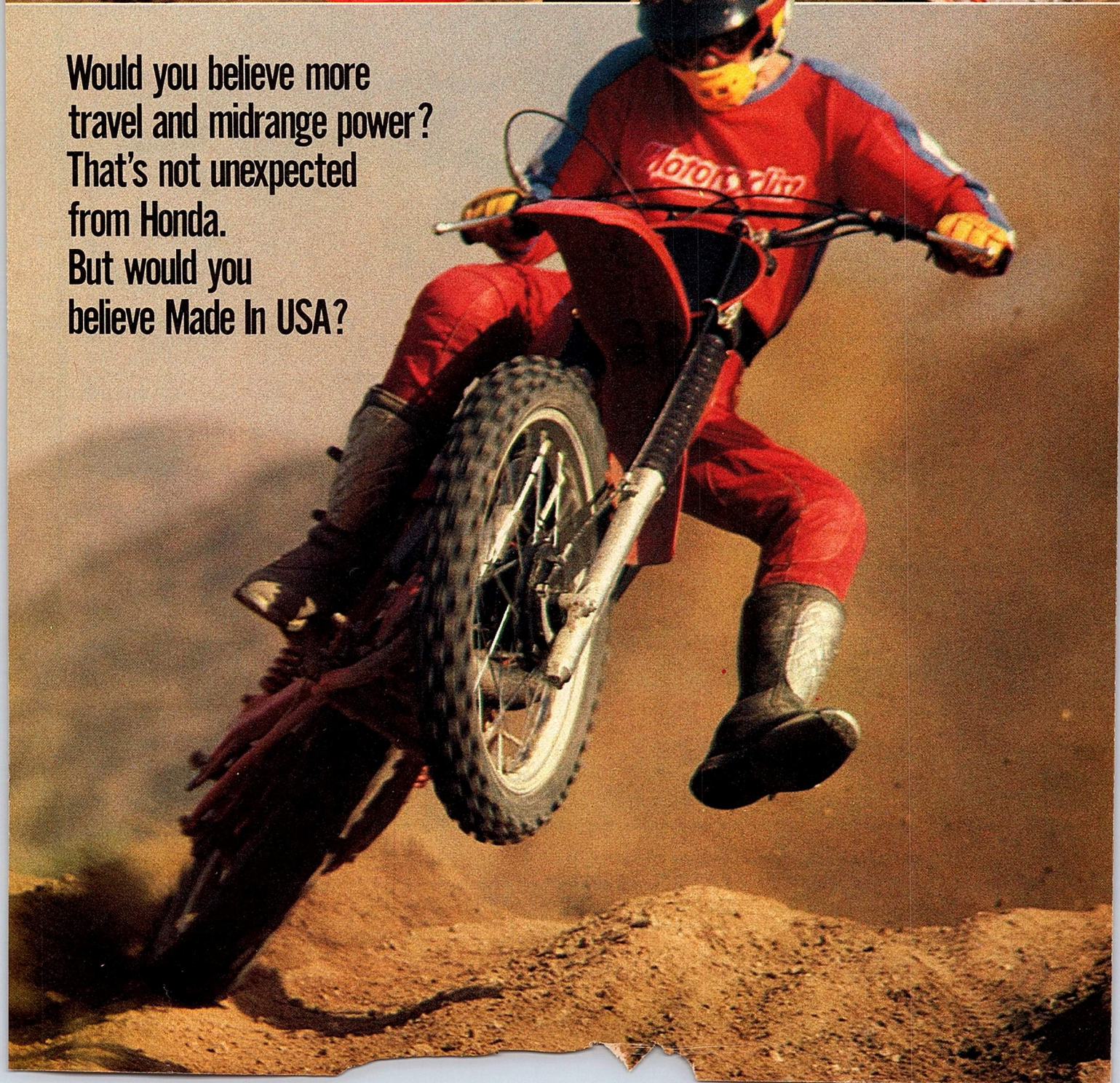
was two-fold. The prime offenders were the Showa bargain-basement shocks. They simply weren't up to the demands of controlling the rear wheel through nearly a foot of travel. Honda had tried to camouflage the boingers with a coat of red paint, but their rude personality showed through the make-up. The other problem was the frame itself. Its design was lifted from Husqvarna (who has since abandoned the set-up) and featured lots of nice chrome-moly tubes going every which way, except the right way. As a result, it was limp as a wrist on Hollywood Blvd. Even the red paint couldn't hide the fact that the flexy-flyer frame couldn't hold the steering head and swingarm pivot in the same relative position. Despite the under-designed shocks and frame, the old CR-R was still a pretty good motocrosser. But for 1980, the engineers weren't going to be satisfied with building merely a "good" bike. They wanted the best.

First off, they dialed more rigidity into the frame. Not by tacking on a few extra gussets here and there, but by switching to double downtubes in place of last year's single downtube. The twin tubes offer better triangulation than the single tube, and provide greater flex resistance. These tubes are heavily gusseted where they tie into the steering head for further strength. The new front section is rigid enough so that a head stay is no longer required. While the frame was up on the cutting block, the head angle was steepened half-of-one degree, to 28 degrees. This decreased trail two-tenths of an inch, to 4.5 inches, and put one percent more of the bike's weight on the front wheel.

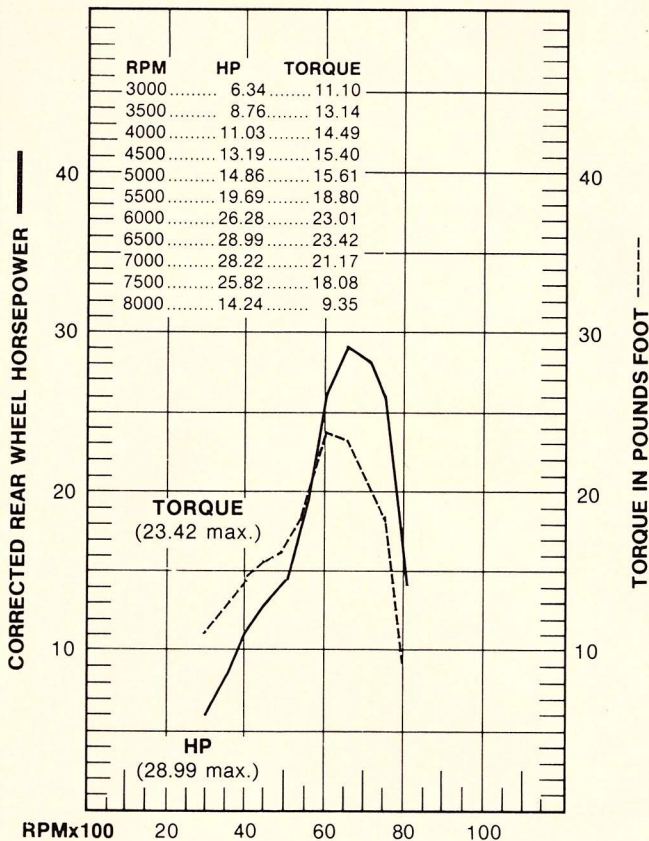
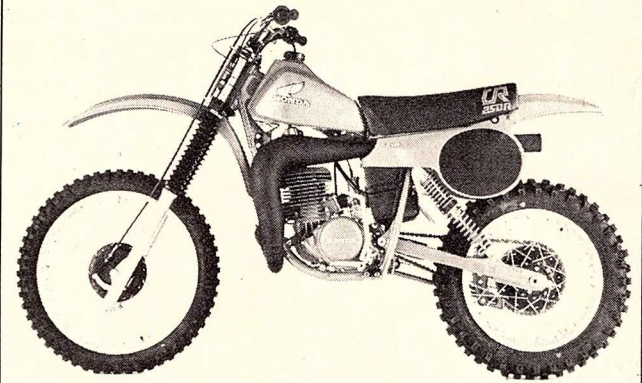
A lot of the changes to the Honda's powerplant were dictated by the switch to double downtubes. To clear the frame, the bike now has a center exhaust port. The port dumps straight out instead of angling to the right to dodge last year's single downtube. Theoretically the cen-



Would you believe more
travel and midrange power?
That's not unexpected
from Honda.
But would you
believe Made In USA?



HONDA CR250



PRICE

| | |
|--------------------|--------|
| 1980 HONDA CR250R | N.A. |
| 1979 SUZUKI RM250N | \$1749 |
| 1979 YAMAHA YZ250F | \$1829 |

HORSE POWER

| | |
|--------------------|-------------------|
| 1980 HONDA CR250R | 28.99 at 6500 rpm |
| 1979 SUZUKI RM250N | 31.40 at 7500 rpm |
| 1979 YAMAHA YZ250F | 30.24 at 8000 rpm |

WET WEIGHT

| | |
|--------------------|----------|
| 1980 HONDA CR250R | 237 lbs. |
| 1979 SUZUKI RM250N | 231 lbs. |
| 1979 YAMAHA YZ250F | 234 lbs. |

SUSPENSION TRAVEL

| | |
|-------|----------|
| FRONT | 11.8 in. |
| REAR | 11.4 in. |
| FRONT | 11.2 in. |
| REAR | 11.8 in. |
| FRONT | 10.6 in. |
| REAR | 10.4 in. |

Suggested retail price.....N.A.
 Warranty.....None
 Number of U.S. dealers.....1787
 Cost of shop manual.....Included

ENGINE

Type.....Two-stroke reed-valve single
 Displacement.....247cc
 Bore x stroke.....70 x 64.4mm
 Compression.....7.3:1
 Carburetion.....1, 36mm Keihin slide needle
 Ignition.....CDI
 Lubrication.....Premix
 Air filter.....Oiled foam

DRIVETRAIN

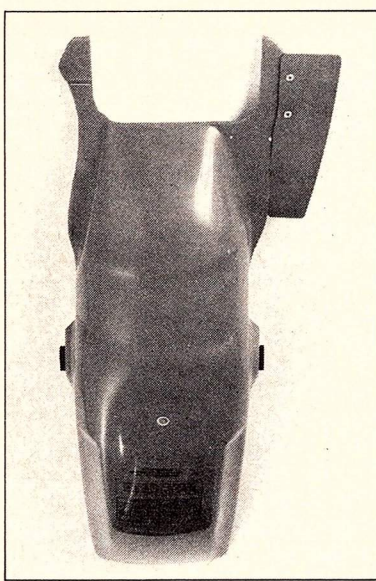
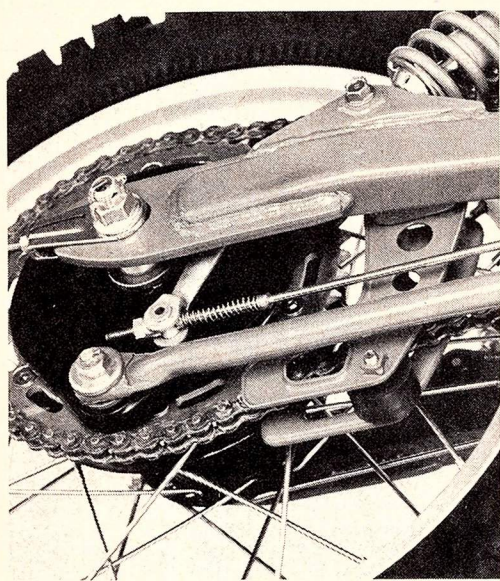
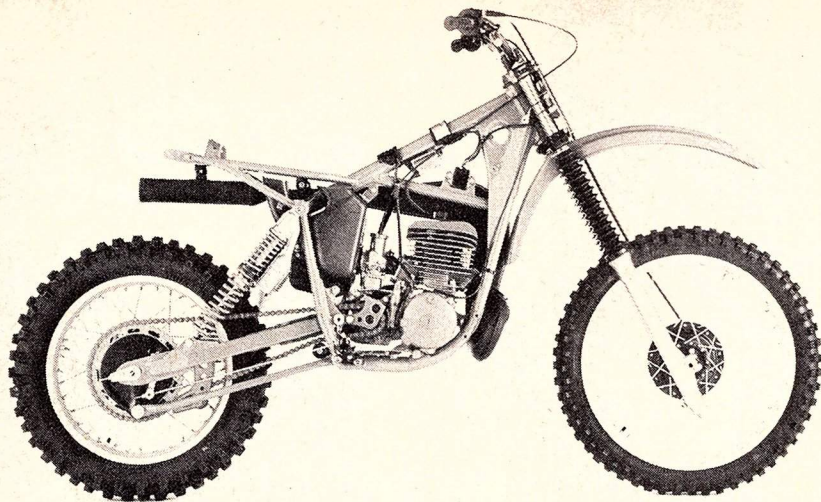
Primary transmission.....Straight-cut gears, 3.25:1
 Clutch.....7 plates, wet
 Final drive..... $\frac{5}{8}$ x $\frac{1}{4}$ (No. 520) D.I.D. chain, 49/14

CHASSIS

Fork.....Showa, 37mm, air/spring, 11.8 in. travel
 Shocks.....Showa, gas/oil, 11.4 in. wheel travel
 Front tire.....3.00-21 Bridgestone Motocross M17
 Rear tire.....5.10-18 Bridgestone Motocross M20
 Rake/trail.....28.5°/4.5 in. (114mm)
 Wheelbase.....57.38 in. (1457mm)
 Seat height.....38.25 in. (971mm)
 Ground clearance.....13.38 in. (339mm)
 Fuel capacity.....2.2 gal. (8.5 liters)
 Wet weight.....237 lbs. (107kg)
 Colors.....Red

PERFORMANCE

Power to weight ratio.....8.2 lbs./hp
 RPM at 60 mph in top gear.....7300 rpm
 Speed in gears at (redline).....(6500) 1st 23.58 mph;
 2nd 28.15 mph; 3rd 36.13 mph;
 4th 44.79 mph; 5th 53.38 mph



The CR has few chain slack problems, partly because the countershaft is located only 3.2 inches from the swingarm pivot and partly because of a three-roller guide system. The American made fender unbolts as a unit so replacement is easy if you break one.

tered exhaust port should flow better. Inside the cylinder several changes in port timing were made to broaden the CR's powerband while retaining approximately the same peak horsepower. Most of the differences are just fractions of millimeters, with the exception of a reworked intake port. Formerly it was bridged to form two separate openings—the main intake, with a smaller booster port above. The bridge is gone now, boosting intake port area by a generous 3.5 square centimeters. The upper portion of the port functions as a booster transfer port during part of the stroke. The port layout still incorporates two tunnels leading down into the crankcase to allow direct filling, much like the case-reed in Suzuki RM motocrossers.

To capitalize on the porting alterations, the electronic ignition has a new advance curve and the grid-pattern reed petals are thinner to provide better throttle response. The carb is the same 36mm Keihin fitted

last year, though the exhaust system is all new. It is longer and narrower to provide a broader powerband. The silencer is longer too, to cut down on noise. The 250 retains a chrome cylinder bore. Provided the air filter is serviced correctly, the chrome bore will outlast a conventional steel liner. It is also lighter and offers superior heat-transfer characteristics.

The only change to the motor's lower end is deeper support webbing under the left transfer tunnel. The idea behind this was to reduce the possibility of a blown base gasket should a novice mechanic fail to fully tighten the cylinder nuts. We're glad that the rest of the bottom end is unchanged since it is probably the slickest clutch-gearbox combination in the 250 class. The tranny shifts crisply with a short throw and is just about immune to missed shifts. There's even a special mechanism to eliminate oversifting. The clutch will take a lot of slipping before heating up, so you can practice brutal

back-to-back starts with no ill effects. Once underway the clutch need only be used if you find yourself one gear too tall. Fan it once and the engine will be back in the meaty part of its powerband.

With the reworked frame, the Honda guys figured that they had the flex problem licked, so next they concentrated on the suspension components. They told Showa that they'd be willing to cough up some extra yen for some really advanced stuff for the '80CR. Showa complied by blending the best points of the competition's units and adding a little trickery of their own. Out came the reservoir-equipped nitrogen-purged aluminum shocks on the CR250. The nitrogen is contained in a rubber bladder separate from the oil. The shock body and the finned reservoir are a one-piece aluminum casting. Like Ohlins and Kayabas, the damping piston slides directly against the inner wall of the shock body. This design provides excellent heat transfer to reduce shock fade due to heat build-up. To cut down on mechanical friction, the shaft slides against a special low-friction bushing. The damper piston has a Teflon ring for the same reason. The Showa feature two-way adjustable rebound damping. To change settings the springs should be removed so the shaft can be rotated 180 degrees. At one point there are two detent clicks right next to each other—either of these provides the soft rebound setting. Exactly 180 degrees opposite is a single detent click. It is the firm rebound damping setting. The bike is delivered with the shocks set on the soft damping setting. Naturally, there's a spring pre-load adjustment allowing the dual springs to be set to any of five positions on a ramp-type adjuster. It's much quicker and easier to change than the snap-ring adjusters on Kayabas and Ohlins. To cushion bottoming the shafts are fitted with tall sponge urethane bumpers. The shocks aren't rebuildable, but Honda predicts that they should last about two seasons before requiring replacement. Travel is up 0.4-inch this year, so the rear wheel now strokes 11.4 inches.

The front fork looks nearly identical to last year's, but internally it's as advanced as the shocks. The quantity of travel is the same 11.8 inches, but Showa has gone all-out to improve its quality. Now there are air caps to provide adjustability for track conditions and rider weight. The damping and spring rates are improved. And to reduce stiction there are synthetic bushings in the tops of the sliders *and* the ends of the stanchion tubes. These two points are where most of the bending loads

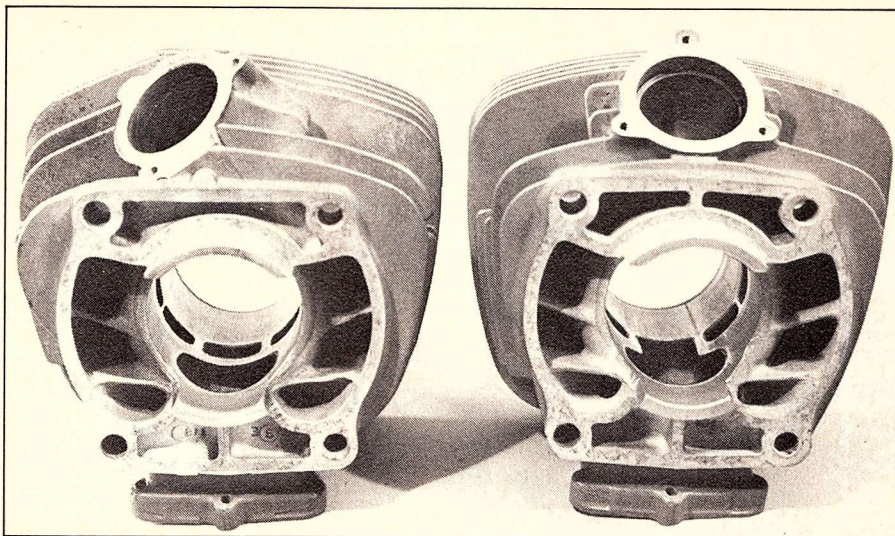
on the fork are focused, so the slippery bushings should greatly reduce binding and stiction. They are made of a composite of Teflon, bronze and lead—the same material used in the bushings on the shock shafts.

As trick as all the new suspension is, it's likely to be upstaged in the showroom by the new gas tank. Finally, at long last, Honda has seen fit to bless us with a real live plastic tank. And wonder of wonders—it even has a great big filler opening. No more dented aluminum, no more red paint on your leathers. And as if the tank alone wasn't enough, Honda has come up with their own special formula for bonding the logo stickers to the tank. No Yamaha sticker-flap for this beauty. Those little logos stayed put throughout the entire test. And don't forget the genuine FIM-approved number-plate/side-panels. We appreciated the durable new plastic after a belly-flop in a set of whoopers. The bars were pretzeled into clip-ons, yet the cosmetic items were still showroom sharp.

The only other change of any consequence is the switch to conventional Bridgestone knobbies. They look a little like the Claw Action meats fitted to last year's bike, but they work a lot differently. The claw tires were fine on some types of dirt, but skatey on others. These same Bridgestones will come standard on a number of Japanese motocrossers this year, but Honda ordered their's with an exclusive rubber compound. It's no wonder the Big H wants to keep it a secret—they're probably the best Japanese knobbies we've ever ridden on.

The tires are definitely an aid to the CR's predictable and very precise cornering characteristics. On both sticky loam and slick dusty adobe the front end holds your line better than any other 250. The quick geometry makes it easy to change course in mid-turn to get around slower bikes. Should you push it too hard and get the front tire to wash out, a quick flick of the bars will usually get you back in control. The CR isn't particularly light, but it *feels* more nimble and responsive than most other 250s. This apparent lightness encourages you to try things that you wouldn't consider attempting on an RM or YZ. You can pitch the Honda into a turn with more confidence, and it sticks. Or you can smack berms just a little harder without getting out of shape. The bike really steers, and it proves it again and again in every corner. No, the Honda isn't crash-proof, but it *does* give you every opportunity to save yourself if you get out of shape.

The nimble steering has its drawbacks in deep sand and mammoth bumps. The CR can be knocked off

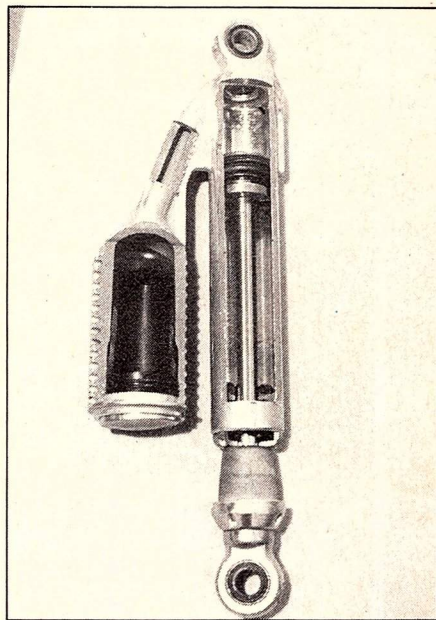


Old cylinder at left had a bridged intake boost port which is missing on the 1980 center-port cylinder. The rubber bladder in the Showa's aluminum reservoir isolates its nitrogen from the shock's oil.

course more easily than the slow-steering Husky 250CR. Keeping your weight back and the gas on will usually keep the bike straight. This bit of twitchiness is a small price to pay for the Honda's steering precision in other situations.

Thanks to the super-supple Showa front fork, scalpel-like accuracy does not decay on undulating terrain. Those synthetic bushings really do a number on stiction and let the front wheel react smoothly, even to razor-edged ripples. It takes pretty ruthless bumps to make the front end chatter towards the outside of a turn. The smooth fork action sucks up braking bumps better than all but the Husky, so you can use the front brake hard without running out of traction or beating yourself to death. The damping and springing are nearly ideal, so there's just about zero harshness delivered to the rider. Honda recommends 10-to-15 psi of air pressure in the fork, but for our 160-pound testers we settled on eight psi. This let the fork absorb the little ripples, yet not bottom noticeably on huge whoopers and jumps. Our only complaint with the Showa fork was occasional topping out as the fork extended fully. Raising the oil level slightly might put an end to this.

The rear suspension is even better than the front. With both damping and pre-load on the softest settings the shocks simply can't be faulted. They function so much like the unparalleled Swedish Ohlins that most riders would be hard-pressed to tell the difference. They're that good. The Honda's ride over battering stutter bumps makes an RM feel abusive by comparison. With the Showa's dual-rate springs and large sponge bumpers, you never feel the bike hit



bottom on big impacts. Overall, the Husqvarna has a small edge in suspension action. If the Showa fork was cured of its topping tendencies, it'd be even closer.

With this sort of exquisite suspension, the CR250 can't help but make optimum use of all of its horsepower and cornering accuracy. Since its wheels stay on the ground more effectively, the Honda brakes better, steers more predictably and hooks up better than the other 250s.

The R-model is a torquer, not a revver. The porting and pipe alterations have cost the bike .8 peak horsepower, but have also boosted the midrange power considerably. The '80 model makes 2.1 more hp and 2.4 foot-pounds more torque at 4500 rpm than it did a year ago. It has a somewhat smaller advantage clear from 3000 to 6500 rpm, where it peaks at 28.99 hp. From there it tapers off where the old engine kept on building. For example: the '80 is all through by 8000 rpm, making only 14.24 hp. At the same speed the '79

was still going strong with 28.24 hp. It's obviously counterproductive to scream the center-ported engine. Instead it works best if short-shifted like an open-class bike. On smooth TT-like tracks the bike will likely be slower than the '79. Suzuki's RM-N has a 2.4 hp advantage on the 1980 Honda too. On rougher tracks the new CR makes use of its stronger midrange, and the tables turn. At middle revs the Suzuki trails the CR250 by between one and three horsepower.

The easy-going power makes the Honda a cinch to ride. There's no need for frantic shifting to get competitive acceleration. The CR simply hooks up and goes. An extra mea-

sure of predictability is provided by the bike's ample flywheel inertia.

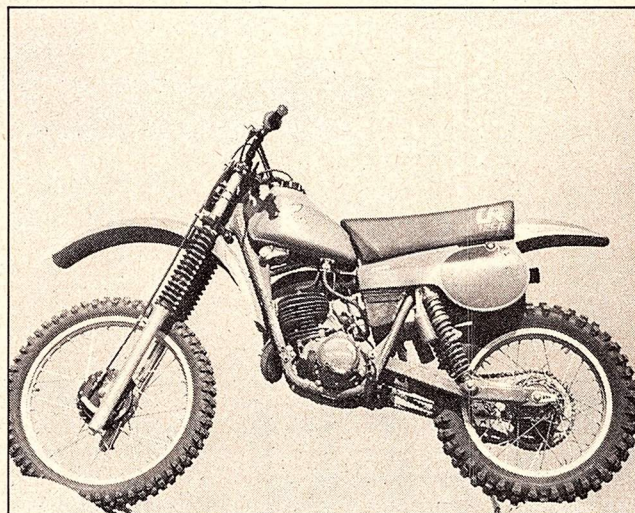
The brakes and wheels are identical to those on last year's bike. The front stopper offers decent feel and has enough power to lock the wheel with a moderate squeeze. The sensitive full-floating rear brake isn't as easy to get along with. We repeatedly stalled the engine while slowing for tight turns until we learned to use a delicate boot. Even with the excellent rear suspension the wheel sometimes chatters on ripply surfaces. The year-old wheels are a little on the fragile side, but religious spoke maintenance will keep them in one piece.

One piece. That's what the CR feels like. Last year's mismatched

suspension pieces are history, and now the bike functions as a unit. The engine, suspension and handling all complement each other. Honda must have adopted that old American maxim: If at first you don't succeed . . . The '79 CR250R came close to succeeding. For 1980, Honda has definitely tried again. The results are worth the effort. All that remains to be seen is how well the Honda stacks up against the other new models. We wouldn't be surprised if good-old American ingenuity wins out and the Honda is the best 250 of the year. It's just a little ironic that it took the biggest Japanese bike builder to come up with the first competitive American motocrosser. **M**

Impression: 1980 Honda CR125R

PHOTOGRAPHY: KEN VREEKE



ure. We found it pulled high revs, but lost some of midrange power.

The bike sports a newly stronger double-cradle y frame and Showa suspension components. The new suspension components are the same technology as the 250 but result in some character differences. The coil shocks, coupled with banana-style swingarm, provides more wheel travel, up to 11.8 inches, over last year's. They react

CR250R in the road test.

Last year's Claw Action tires have been replaced by newly designed Bridgestones and the controversial 23-inch front wheel was dropped in favor of a conventional 21 inch. The bike feels more stable and rigid and steers accurately through the corners, changing direction on command, a switch from last year. Obstacles that would have sent last year's CR125R in unscheduled directions are now handled with confident predictability.

The 125 offerings from the Big Four were very close in racetrack performance last year, though the Honda perhaps suffered the most in handling and suspension disorders. Without having ridden all the new models, it would be invalid to judge the CR125R at the top of the heap, but unless the other Japanese manufacturers improve on their last models with the same magnitude as Honda, the CR125R is going to be hard to beat. **M**

CR125R could very well catapult them back to center stage.

We spent a day with the new CR125R at a recent Honda press preview and found it to be quite improved. It shares many of the same technical advancements as the resurrected 250R, and then some. The new center-exhaust cylinder features an increase in fin area and a reboreable steel sleeve in place of last year's chrome bore. The new cylinder is said to add 2.5 hp to last year's

much better to large bumps and performed excellently in most situations. We did find that during the initial few inches of travel the shocks tend to be somewhat harsh, but only when hitting small square-edged type bumps. The new air-assist forks boast 11.8 inches of travel, up a full inch from last year, and work better than those on the 250R. They lack the annoying topping habit and the accompanying noise, yet feature the same basic technical make-up as the

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THE ASPENCAD RALLY

Ever try touring
with 5000 friends?

By Jeff Burt

There is a knoll which overlooks U.S. 70 and State Route 37, the two roads bisecting Ruidoso, New Mexico. These are the two main drags in town. Along about Wednesday of the Aspencade Motorcycle Convention it is unseasonably warm and the air at this elevation, 6500 feet, is so clean it hurts. The knoll affords a clear view of the valley across town to the race track, beyond to the Convention Center and just further to the Chaparral Hotel where already, ant-like from this distance, long columns of bikes are collecting.

They are all there, all the brands, but Harleys and Gold Wings predominate. Most are top-of-the-line or near it, well-kept road machines whose odors reveal heavy use. The licenses are chiefly from South Central and Western states, but contingents from the Eastern U.S. and Canada are also in evidence. Virtually all sport touring equipment.

The bench racin', backslappin' and eyeballin' hits full-throttle as the Aspencade motto, "Meet old friends, Make new ones," takes natural effect. Easily 1000 bikes are present and the hotel lot is not yet full.

Til Thompson has seen Ruidoso much as the eagles have, tracing cir-

cles in the desert updrafts and swooping down across the forest, his target the narrow matchstick of a runway that marks the western edge of this Sacramento Mountain town.

"Flew Army Air in WW II. Puddle jumpers, mostly L-5's. Pacific theatre recon, Guadalcanal and the like."

Thompson embodies his speech: trim, declarative, energetic, good-humored. In 1970, he founded the Aspencade rally, now the biggest road ride in America.

"Mustered out in '47 and started a publicity business in California. Heard about the horse racing at Ruidoso Downs and came out to work the track every summer for five years. Finally moved here with my wife Marcie in '52. Bought some land right at the end of the runway. Only pilot in town that doesn't have to rent a hangar."

At that time, Ruidoso numbered 1000 residents. A resort community, by any standard it has grown leisurely since then to its present 6000 year-round population. In summer, it's the horse racing season. In winter the skiers arrive. During these months its motels, cabins and condos, its bars and restaurants, bulge with the influx of 40,000 recreational transients.

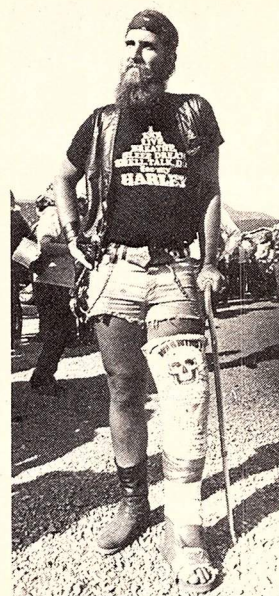
Thompson is speaking in the late afternoon from his hangar/garage overlooking the runway, his hand resting on the bars of his Harley '74. It's a venerable piece: single seat, fairing and bags, vintage about 1968, but one doesn't ask. It has 50,000 miles on the odometer.

As he turns back up the driveway toward the house a muffled drone begins, not unlike a private plane but somehow closer and more insistent. Thompson looks up at the highway, raises his open hand in a wave and flashes a grin that could reach from here to El Paso as six motorcyclists heave into view through the trees and pound down the final turn of the mountain road that leads into town.

"This whole thing started in '70," says Thompson over a before-dinner whiskey sour. "The AMC. Aspencade Motorcyclist Convention. Began as a rally, really. You see, the Retreads were formed then by a friend of mine in San Diego, George Speidell. Good riding club, not too many rules, you've just got to be over 40."

There is a pause as Thompson gives the only inkling of his age. The only one he is ever likely to give.

"Well," he takes up again, "I had some flattrack races around the area in the 60s, and a good meet set for



PHOTOGRAPHY BOB CARPENTER



here in October of '70. So, I took out a one-inch ad in *Road Rider* announcing the first Aspenade, and what do you know—we got almost 200 applications from people willing to ride out.

"Things kinda ballooned from there." Thompson is obviously tickled. "Doubled the attendance in '71 and again in '72. Started judging bikes that year 'cause there were so many of them over at headquarters, the Chaparral Hotel. Lots of 'trinket people' too. Buckles, leather, T-shirts. Finally got so big we had to put it indoors, start a trade show.

"It really grew in '77. Harley and Honda came aboard then. Suzuki last year and now Kawasaki's got a booth. We've got 1800 pre-registered delegates this year, and I expect we'll top out at, well . . . just get on down to the Chaparral along about Wednesday and see for yourself."

Groups of five and six, clubs in tens and twenties, continue to squeeze their way into the long lines of motorcycles already parked near the Chaparral on Wednesday. Organized bike judging and unorganized bike gawking flows into the late afternoon, small knots of men gathering to palaver around the most interesting machines. A few columns peel off

back to motel and campsite, to dinner or an informal sunset tour. Most stay, and at 6 p.m. the trade show opens. "I've had this booth for three years and been after the factory that long, too, to come out here. I guess they finally decided to give it a look. Good thing—this is a super market. Did you see the bikes up at the judging? Must have been five million dollars worth of machinery and the week's not even over," said Jerry Reid, AMC Official, owner of Western Kawasaki, Big Spring, Texas.

The Convention Center resembles not so much an ice skating rink, which it once was, as a National Guard Armory, modestly lit and cavernous. Slatted floorboards cover the old skating area in the center where the major displays are. The "trinket people" ring the outer concrete, hawking their wares.

Harley-Davidson commands the most lavish display, all manner of monster machines to be touched and sat upon and admired by the meanderers. Two attractions are the cutaway Tour Glide engine, exposing the new five-speed gearbox and fully enclosed chain; and a massive 80 Clas-

sic sidecar rig, painted beige and looking big and sturdy enough to tote the main island of Japan.

Honda is a close second in audience attention. 'Oohs' and 'ahs' are reserved for the Interstate: a Jet Black 1100cc Gold Wing with travel accessories OEM from Japan, right down to a Honda-Clarion AM-FM/CB radio installed in the port side fairing lower.

The Suzuki GSX1100 draws what youth exists in this predominantly over-40 crowd. With 16 valves and obvious GS1000 heritage, it quickly picks up the handle "Claybrook Challenger." Kawasaki's KZ550 and KDX175 (*Motorcyclist*, Nov. '79) are joined by a prototype KZ1300 B with OEM fairing and bags which, taken with the Interstate, signals a new era of factory competition with the American accessory manufacturers.

The surprise of the show and the display where the question, "Are you guys still in business?", is most often asked, is the Triumph exhibit. In business they are, with maybe 6000 units slated for the U.S. in 1980.

"This really isn't our crowd," allows the Triumph rep. "We'll do the big winter show tour—Anaheim, Houston, Cincinnati, Daytona—but it's important we let people know now that we're alive."

A tour on Thursday sees 2000 bikes drumming up U.S. 70 to Hondo for a show by the Mexican Fiesta Dancers, a High School troupe whose enthusiasm is matched by excellence. A short backtrack to Lincoln for lunch, then a cruise around the western rim of the mountains completes the 70-mile loop by mid-afternoon.

Friday finds another 2000 touring into the reservation for the Mescalero Apache Dancers. Lunch there is a

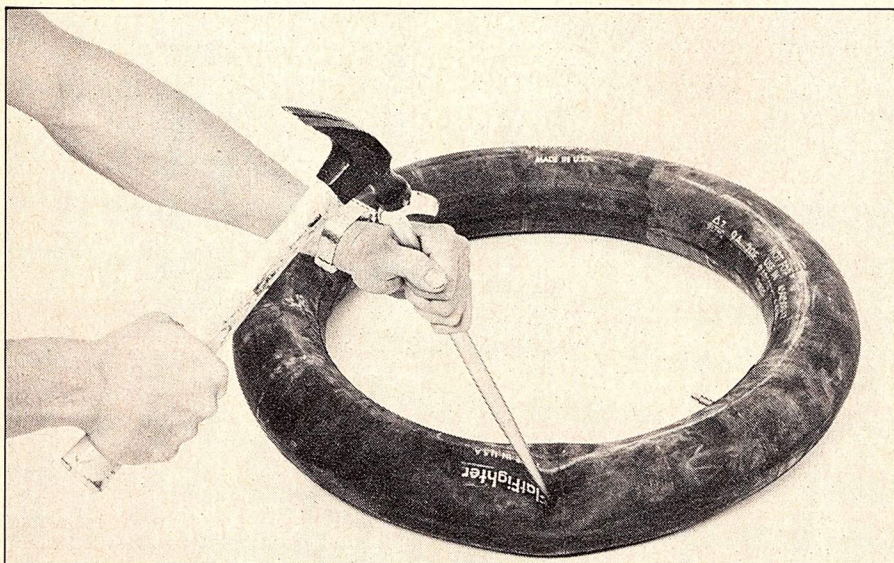
continued on page 71

MAJOR PRIZE WINNERS

ASPENADE QUEEN: Susan Pedersen, Ontario, Canada H-D
BEST DRESSED CLUB: UAW (United Auto Workers) Arlington, TX
BEST DRESSED COUPLE: John & Betty Drynan, N. Glenn, CO H-D
LONG DISTANCE SOLO MALE: Henry Haller, Switzerland YAM
LONG DISTANCE SOLO FEMALE: Jeannine Fontaine, Philadelphia, PA HON
LONG DISTANCE COUPLE: Richard & Marlene Hall, Danbury, CT BMW
OLDEST BIKE RIDDEN TO CONVENTION: Dave Nichols, Alamogordo, TX '37 NOR
ASPENADE FAMILY: Larry Rose Family, Pampa, TX H-D

PRODUCT EVALUATION

FLATFIGHTER TUBES



Asudden loss of tire pressure while blasting down the interstate can spit you off before you even know what happened. Many times something as small as a glass sliver can puncture a tube, allowing it to tear to blowout proportions. Flat tires are even more familiar to dirt riders. Smashing into a

hidden rut or rock can pinch a tube before you even make it out of camp.

To help fight the flat tire menace, the people at Big 4, Inc., P.O. Box 3683, Spokane, WA 99220, have introduced what they call the Flatfighter tube. It is *three times thicker* than a "normal" tube and is made of specially formulated tough butyl rubber.

The valve base is about four times thicker than a standard tube's to resist tearing during hard acceleration or braking. Dirt riders are able to run the tube at lower pressures with less worry about pinching.

Unfortunately, because of the added thickness of the tube, it's also much heavier. We weighed-in a standard tube at one pound, four ounces while the heavy-duty Flatfighter weighed three pounds, eight ounces. This extra unsprung weight is one of the prices you'll pay for the added protection. It also takes a bit more swearing to install because of its extra thickness and uncompliant shape. For an enduro rider fighting the clock, this could be disastrous. You won't want to take one on the trail with you anyway, unless you can tie it around your waist, because it doesn't fold easily like a normal tube.

The added protection of the Flatfighter doesn't come cheap either. At \$10.95 it's the most expensive tube you can buy, but if you have the money and the time and patience to install it before venturing out, you may save yourself a lot of needless aggravation.

MXL GRADIENT SHIELD

For years motorcyclists have faced the dilemma of trying to decide which shield to ride with—clear or tinted. On bright days everyone wants a dark shield to cut glare and reduce squinting, but what if the ride takes longer than planned and you get caught at night? Can't risk that because riding with a dark shield at night is far too dangerous. So a lot of people squint all day, or try to figure some hokey way to carry a spare shield of the opposite tint without scratching it.

Well now there's a better deal—National Hydron's new MXL Gradient Shield, which works beautifully both day and night. A patented dipping process developed by the company's French subsidiary produces a graduated, or Gradient, tint which begins dark at the top of the shield and disappears to clear in the middle. The Gradient is available in both MXL (Means Xtra Life) Scratch-Resistant and Hydron Anti-Fog lenses.

Motorcyclist has used the Gradient

for several months and we recommend it heartily. Its daytime glare reduction isn't as effective as a fully tinted shield, but it's so great an improvement over clear shields that most people will be completely satisfied. And at night the tint is practically imperceptible. It doesn't rob shadow detail or dim the intensity of lights, though a diffused halo surrounds certain lights viewed through the Gradient. For us the "tint line" where the dark coloring merges with the clear never irritated or distracted our eyes as might be expected.

Presently the MXL Gradient is available only on 200 Series shields for full-face helmets, and you may have seen them being tested in the bright glare of U.S. tracks on the Winston Pro Series circuit since many dirt racers used them last summer. In time the Gradient process will be expanded to most of the many shield models produced by National Hydron.

Pricing will be about \$1 more than

that for a standard clear or tinted shield. For our money it would be worth it at twice the price. MXL makes Gradients for all the major full-face helmets—Bell, Arai, Shoei, KRW, Fury, etc. **M**



National Hydron sells shields of two types with the gradient formula. "Hydron" is an anti-fog treatment valuable for riders in cold climates. "MXL" is an anti-scratch coating which extends life. The same shield can't have both coatings.



chile so oily and strong that history might have been rewritten had Geronimo battled the Long Knives with it instead of arrows.

Saturday's parade is a 20-year harvest-time tradition in Ruidoso, with floats, horseback riders and the High School band. Til Thompson installed the bikes at the inaugural Aspencade '70 and they have participated since then amicably, if a bit overwhelmingly, with the natives. A two-mile retinue, six abreast, lopes east on State 37 through town where the police later estimate 60,000 on-lookers have gathered. The terminus is a barbeque pit at the park where the paraders, bikers and townsfolk rub elbows with mutual good will.

"Had almost 5000 this year," says Thompson that night as the trade show closes. "About 4000 bikes, largest event of its kind in the world. The C of C figures two million retail dollars came to town this week. No gangs, did you notice? No trouble, except for a few Harley-size hangovers. Some of my regulars call this the 'Aspirincade', it don't make no difference. Everybody's happy. After my vacation I'll get after Aspencade '80, the tenth anniversary event. Gonna be lots of surprises."



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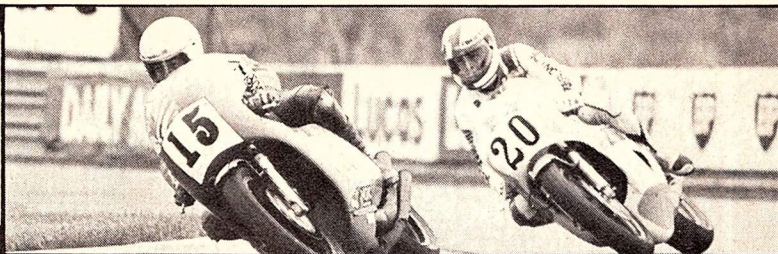


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SPORT



Howerton Wins Trans-USA Series

By Jim Gianatsis

You had to admit, it was rather embarrassing. It was the tenth year of the Trans-Am Series, now renamed the Trans-USA Series, and with Bob Hannah's winning of the title last year amid decreasing European opposition it seemed the Series had finally produced Americans who could beat Europeans. But then, along came Belgian Team Honda rider Andre Malherbe, the only European in the 1979 Series, pulling off the opening race win at Mid-Ohio and then increasing his points lead even further with a third overall the following weekend at Buchanan. He was really making our guys look bad.

Most American fans didn't even know who Malherbe was and here he was beating our finest factory stars. Sure, Hannah was recovering from his broken leg and Marty Tripes was between rides making the switch from Honda to become Hannah's new Yamaha teammate. But what

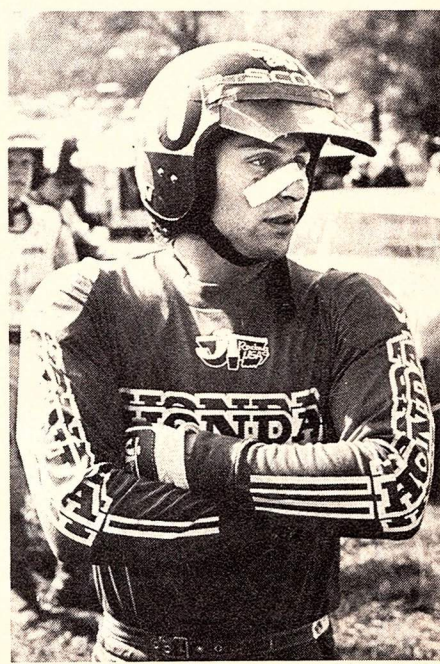
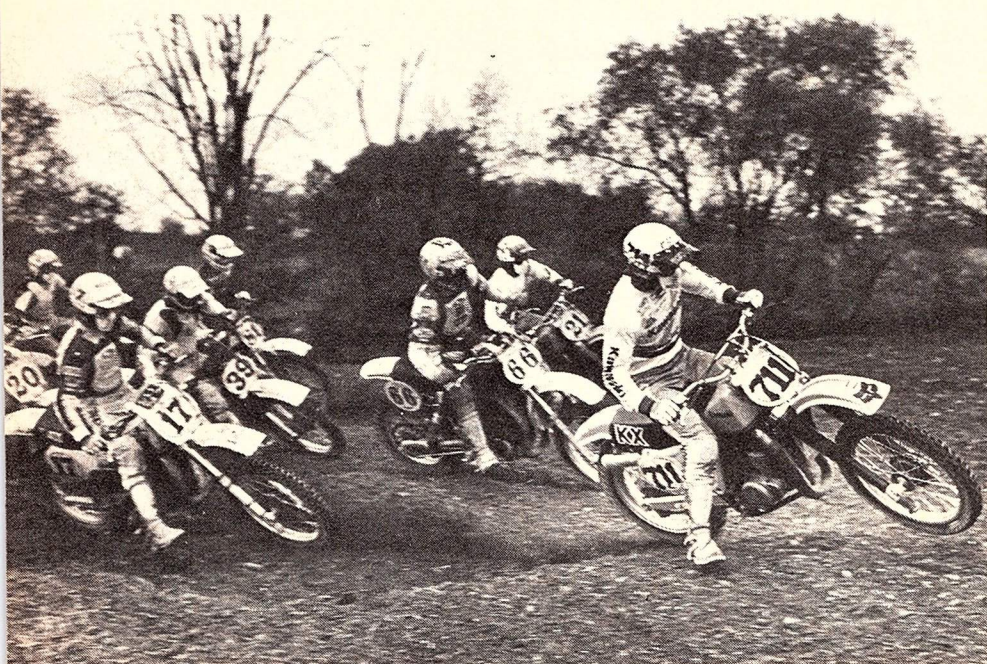
about everyone else? No one even realized he was the same Andre Malherbe who had ridden the Trans-USA Series so unspectacularly in 1977 on a factory KTM and hardly ever finished in the results. Nor did they realize that this past season with Honda in Europe, Malherbe had increased in his skills and desire so impressively that he finished in the 500cc World Championship standings just one point out of second.

The irony of the whole situation was not just that one European rider was whipping all the Americans, though that certainly did leave egg on a lot of faces, but that the Trans-USA had been America's most successful outdoor motocross until the sanctioning AMA decided it needed changing. Competition director Mike DiPrete came up with the idea of changing the format to allow riders to compete on any displacement size bike they wanted, rather than just Open-Class bikes as the International class had been limited to in the past. The other was to promote an American versus European five-man team challenge within the International class races. But when some of the riders pledged to the team challenge couldn't make it because of injuries

or other commitments, the AMA lacked the promotional ability to sign up replacements and the entire challenge fell through. World Champions like newly crowned 250cc champ Hakan Carlqvist and 500cc champ Graham Noyce wanted to stay home and compete in National events, with Carlqvist also planning a switch from Husky to Yamaha. As for the two European Suzuki stars who had kept the Series on its feet for so many years, rumors had five-time 500cc World Champion Roger DeCoster planning a move from Suzuki to Honda while teammate Gerrit Wolsink had been dropped from Suzuki.

Despite the best efforts of the five top promoters in the country, the AMA allowed the Trans-USA Series to become less than a viable event; the last two races ran with only 20 riders in what used to be a competitive 40-rider field.

But that wasn't the immediate problem for the American riders out on the berms. For them the immediate problem was Andre Malherbe. And it wasn't that Malherbe was faster than any one of them, just consistently fast. The opening race at Mid-Ohio saw Malherbe tying Husqvarna's Chuck Sun in points as the



Brad Lackey's monstrous 440 Uni-Traker grabs the holeshot under snow-filled skies at Unadilla. Pursuing are Howerton (17), Bell (39) and Chuck Sun (66).

A broken nose and wrist ended the Series lead for Andre Malherbe.

Final Point Standings 1979 Trans-USA

| | | |
|---------------------------------|----------|-----|
| 1. Kent Howerton, TX..... | Suz..... | 201 |
| 2. Mike Bell, CA..... | Yam..... | 191 |
| 3. Darrell Shultz, CA..... | Suz..... | 160 |
| 4. Chuck Sun, OR..... | Hus..... | 143 |
| 5. Brad Lackey, CA..... | Kaw..... | 130 |
| 6. Arlo Englund, CO..... | Yam..... | 103 |
| 7. Broc Glover, CA..... | Yam..... | 101 |
| 8. Marty Moates, CA..... | Yam..... | 100 |
| 9. Andre Malherbe, Belgium..... | Hon..... | 83 |
| 10. Danny Chandler, CA..... | Mai..... | 77 |

two of them traded first and third in the two 45-minute motos, with the overall win going to Malherbe because of his larger winning time margin over Sun. Behind them came Yamaha's Mike Bell in third and Suzuki's Kent Howerton untangling his caught foot out of his rear wheel for fourth place.

The following week was Buchanan, Michigan, where Howerton was fighting a bout with the flu. The Rhinestone Cowboy's strategy was to try grabbing the starts with his RN440 works bike and hold on as long as he could. Somehow Kent's plan worked better than expected as he pulled off both holeshots and disappeared from the rest of the pack, never even slowing at all to easily win both motos by huge margins. Finishing second overall that week just ahead of Malherbe was Bell.

Next came Unadilla, snuggled in the mountains of upstate New York and rated as one of the finest Grand Prix tracks in the world. Malherbe's high finish the weekend before had given him the points lead in the Series and by the lap times he was turning in Saturday's practice session

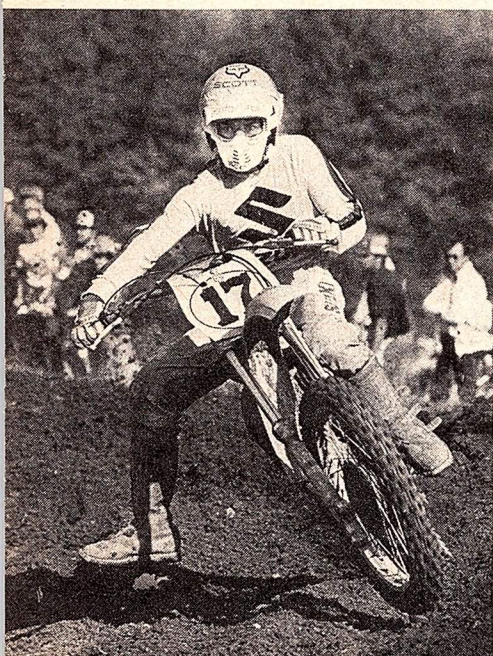
it looked like he just might pull off another win. Then came Sunday's final practice session. While trying to find a new line through a rocky creek crossing Malherbe ended his RC450 Honda, crashing in the muddy water and receiving a broken nose and fractured wrist. He wanted desperately to hold onto his Series lead and went out to ride the first moto. Getting off the line in second place behind Howerton, Malherbe held on to his position for just a lap before the pain in his wrist became too intense and he began dropping back, finally withdrawing from the Series halfway through the moto as he was taken to the hospital for his injuries.

America's top Grand Prix rider, Brad Lackey, finished that first moto in a close second behind Howerton, and then in the final moto came back aboard his works Kawasaki to battle off Howerton and Suzuki's Mark Barnett to snare the moto and the overall win. Why a top rider like Lackey who could win consistently at World Championship events in Europe, but couldn't match that same consistency in his own country was probably due to the Burned Out Syndrome, a common malady which affects most riders who have been racing a few years and find it difficult to keep themselves pumped up week after week. Suzuki's DeCoster was one of the few riders who could. So can Bob Hannah.

Perhaps the one thing which was really exciting to watch in this year's Series was the way the so-called second stringers—riders from the 125cc National class like Yamaha's reigning champ Broc Glover, Suzuki's Mark Barnett and Kawasaki's Jeff Ward—gutted their way up to battle the gods of American motocross with their oh-my-gawd powerful open-

class bikes. No one had dared come into the International class with a 125cc bike as the rules permitted. No one wanted to be mowed down in the course of duty, so these regular 125cc class stars figured 250cc bikes were the next biggest size they could ride safely without killing themselves. And as it turned out they could blow the numberpanels off the Open-Class hotshoes, Bell, LaPorte, Howerton, Lackey, Sun, Malherbe, et al, whenever they set their minds to it. At Mid-Ohio, Broc Glover had led the opening moto for 20 minutes before sticking himself in a mudhole by choosing the wrong line. In another moto the following week at Buchanan it was Broc again, working up from the middle of the pack to pass all the big boys and claim a not-too-distant second place behind Howerton. Then at Unadilla it was Barnett and Ward battling for the lead at one point, with Barnett actually holding off Lackey during the last half of the second moto and finally with two laps to go, being zapped by Bad Brad and relegated to a still impressive second place. Barney had fanned his RH250 up the hills just as quickly as Brad had powered up them with his KX440 Kawasaki.

The last two races of the Series, Road Atlanta and Sears Point, saw Mike Bell dominating with his Yamaha, pulling off one moto win in Atlanta and then wrapping up the Series with both moto wins in California. Taking second overall with one moto win in Atlanta was Suzuki's Darrell Shultz, with Darrell also pulling off second overall at Sears Point. But it was Kent Howerton who finished third overall on both of those last two weekends, good enough to allow the Rhinestone Cowboy to win the 1979 Trans-USA Series overall. **M**



Kent Howerton won overall only once but took the Series with consistency.

Watch Out For The Rest Of The World

The AGV Nations Cup team road racing concept was expanded to a three-round series this year with one round each at Paul Ricard in France (held back in April), Donington Park in England and Imola in Italy. There were five seven-man teams from France, Italy, England, the U.S. and The Rest of The World. At each round every team raced in four races, one each with each of the other teams. France got the jump by winning the first round, but six months later, the British team, led by an unbeatable Barry

Sheene, stormed to victory at Donington. Kenny Roberts was second-highest scorer despite problems and Randy Mamola was fourth, behind World's Gregg Hansford. The U.S. was third for the day behind winner England and The Rest of The World. However, France still led the series despite finishing fourth.

Double points were awarded at the final round of the 750cc series in Italy, and the World squad, led by a recently repaired Johnny Cecotto, sizzled to victory in the round and the series. The U.S., which acquired the help of Skip Aksland for the final round, ended up second for the day and overall. Sheene crashed and broke his collarbone in practice and the English team slumped to last place in the series with France third and Italy fourth. America won the event last year. **M**

SPORT

Carpenter Crowned Pro Stock Champ

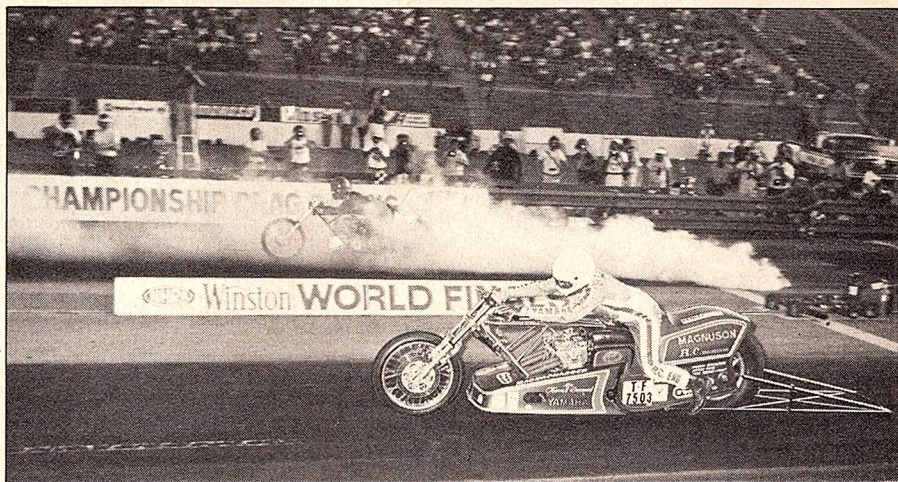
By Ken Vreeke

The NHRA Winston World Finals at Ontario Motor Speedway should have been the site of a few new world records, but it wasn't. The track, usually known as the fastest dragstrip in the world, had only a few weeks earlier hosted the big diesel drags and they had left their sludgy mark. Both lanes were slippery despite efforts to clean them up and the right lane was exceptionally bad:

The National Motorcycle Racing Association (NMRA), a newly formed sanctioning body of the NHRA, had watched Terry Vance and Bob Carpenter of Cornwells Heights, Pennsylvania, go at each other for the points lead since the season opened.

Going into this event, Carpenter and his Kawasaki had a 200-point lead over Suzuki-rider Vance. Not one so easily blushed, Terry posted a 9.02, 148.27-mph qualifying run, setting a new National top speed record, the only record set in the day. Carpenter wasn't so easily intimidated either as he turned in a 9.10, 147.05-mph qualifying run to fill second spot. Kawasaki-mounted Butch Pace followed in third with 9.30 at 142.85 mph. The rest of the eight-man field, with the exception of Ed Ryan's Harley, were Kawasaki mounted, and no wonder. Kawasaki Motor Corp. offered \$10,000 to anyone who wins a national title and it's obviously affected the drag racers.

The first round of eliminations re-



PHOTOGRAPHY: KEN VREEKE, JON ASHER

Pee Wee Gleason fights for lost traction in the greasy right lane during the final while Jim Bernard launches cleanly toward the Top Fuel championship.

flected the condition of the track since the times showed a tremendous disadvantage in the right lane. Ed Ryan, the seventh fastest qualifier easily dismissed Butch Pace's off-pace 9.990, 141.28-mph run. Carpenter did away with sixth qualifier Jay Wade and fourth qualifier Craig Burns defeated the last man in the field, Roger Monroe. Vance took his Suzuki to a decisive win over fifth qualifier Johnny Kirkwood. The inevitable showdown between Vance and Carpenter was secured when Vance put Ryan on the trailer in the semi. Carpenter made a solo pass after Craig Burns dropped with mechanical ills. He screamed through the lights quicker than Vance's time, permitting him choice of lanes for the final.

The final event, the NMRA Pro Stock title, the prize money and all the bonuses went up in smoke with Terry's tire as he fought desperately for traction in the diesel-soaked right-hand lane. With a bonafide \$10,000 check in his sights, Carpenter blasted through the lights in 9.159 at 145.63 mph followed by a frustrated Vance at 9.626, 144.46 mph. Carpenter had beaten the unbeatable Vance/R.C. Engineering team that

has reigned for four years and waltzed away with a \$10,000 door prize to boot. What would anyone do with that kind of money? "I'm going to pay the phone bill," said Carpenter clutching the check.

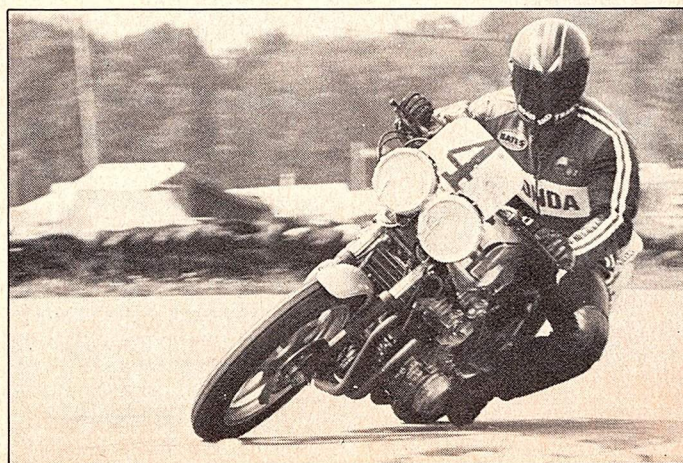
The Top Fuel "Funnybikes" stole the show in a big way. The NHRA Best Engineered award, usually given to some form of auto exotica, was shared by the new Vance/R.C. Engineering Suzuki (shown elsewhere in this issue) and Bob O'Brochta's Terminal Van Lines backwards Kawasaki. As if that wasn't enough to get the crowd stirred, "retired" Russ Collins and his awesome Sorcerer also showed up to bid for the world title.

Bob O'Brochta qualified fastest at 7.81, 168.22 mph. Defending champ Jim Bernard followed with a 7.94, 186.72. Collins filled out the top three with a 8.01; 187.50 mph. The rest of the field read like a who's who in dragracing: Terry Vance, Pee Wee Gleason on a turbocharged Kawasaki, Marion Owens on his double-engined Harley, U.S. Nationals winner Roy "Frog" Thacker and Wayne Davis.

Eliminations saw Vance defeat Wayne Davis, and Pee Wee Gleason

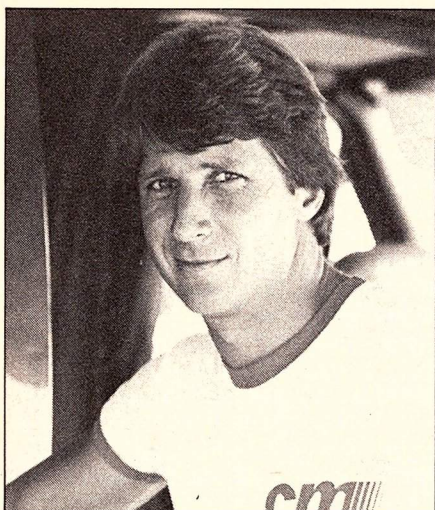
Honda Super Sport Wins The World's Longest Roadrace

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Team Road and Trail has now won both big U.S. endurance roadraces

PHOTOGRAPHY: RICH COX



Bob Carpenter showed little sign of doubt before the final match.

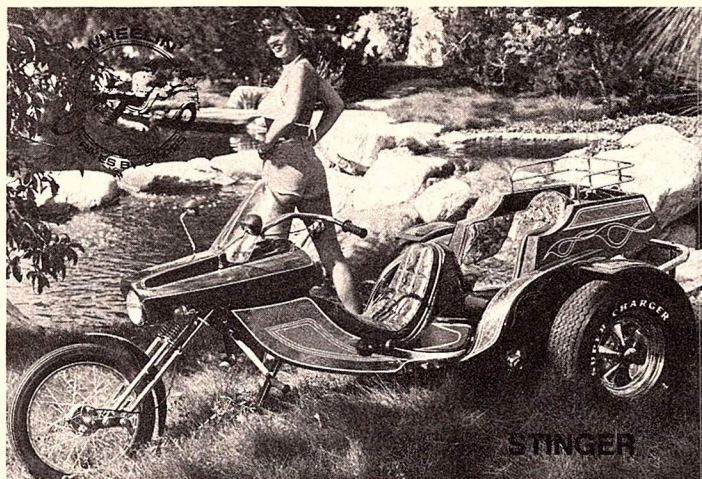
make a solo pass after O'Brochta's Kawasaki threw its chain. Collins set the low ET of the day and put Thacker away with a 7.87, 195.22. Jim Bernard sent Marion Owens to the showers with a 7.99, 184.80. Collins had the lane choice in the semi which left poor Pee Wee with the slippery right lane. He somehow managed to squirt off the line long before Russ and at the end of the strip was half-a-length ahead with an 8.42, 165.74 run despite Russ's quicker 8.11 at 191.48. Vance broke a wrist pin during eliminations so Bernard made a solo pass managing a quicker time than Gleason for lane choice in the final. With Bernard in the left lane, Pee Wee was again at a disadvantage. Bernard hustled his XS Eleven off the line ahead of the lightning quick Gleason and never looked back. He tripped the lights at 7.98 seconds, 185.56 to Pee Wee's below par 8.83 at 140.62 mph.

So at the end of a long season, Bob Carpenter can savor his NMRA No. 1 plate and Jim Bernard has both the NMRA Top Fuel title and the Winston World Finals trophy to comfort him all winter long. **M**

bag at the bottom of a large puddle where your tent used to be.

That's what faced some of the riders on the 30-odd endurance teams that showed up for the WERRA's 30 Hours of Rockingham (North Carolina). Described by one rider as "A poorly-laid-out Daytona," the 1.5-mile track is a stockcar oval with a twisty infield. The catch was that the oval had been treated with some sort of sealant to make it slippery for the cars, and that made it scary when wet for the bike riders. "You could dial on wheelspin at over 100 mph," said a wide-eyed Kawasaki rider.

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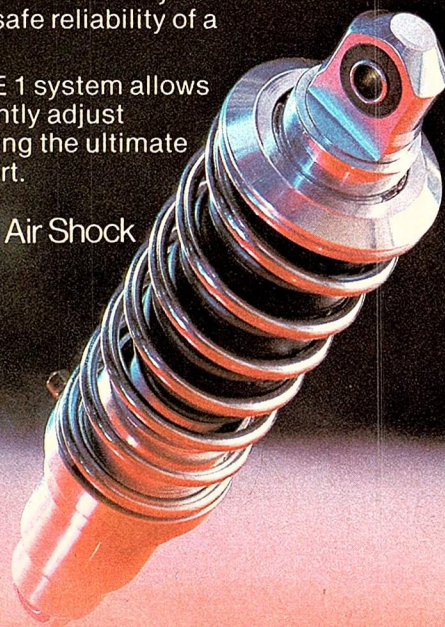
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SPORT

Honda Super Sport Wins The World's Longest Roadrace

heavily-advertised huge purse, there was supposed to be a rock concert held at the same time. But most of the concert as well as some other side-shows were rained out and that washed away most of the prize money.

But neither the lack of prize money, the rain, the slippery track nor the ultra-long distance discouraged the racers, who went at it ferociously. The Team Quester entry led for the first four hours until a long pit stop dropped them from the lead. Team Satyr, with "easily the fastest bike in the race," then took over with riders John Bettencourt, John Fuchs, Jan

Jolles and Dave Roper building a ten-lap lead. Their KZ1000, sponsored by Walt Whitney, had been crashed in practice and Roper crashed it again after eight hours, losing the lead. A host of problems kept the machine from being competitive again and Jolles, in his own words, "Finally administered last rites to the old machine at 1 a.m." when he crashed. Another KZ1000, the Austin Kawasaki entry led for a while. Then Team Blue Moon's CX500 took over.

Perhaps the craziest entry was a lone motorscooter. It was the subject of much pre-race discussion about "rolling apexes" and "moving road-blocks," but it turned out to be not too bad—for the most part. One rider with a much faster bike commented, "There were people who got in the way much more than that scooter. They kind of stayed to the inside. Eventually though, they must have taken a different line or something because somebody knocked them to the moon."

After 19 hours with a nine-lap lead, the leading CX500 was bushwhacked by an oil slick and slammed into a wall, sending the rider at the time, Joe Wallace, to the hospital. They lost a handful of places by the time Mike Bufkin got the Honda back into the race. Then he, too, went down in the

same spot, breaking his foot.

That left Team Road and Trail of Pittsburgh, Pennsylvania, in the lead. After sorting out some tire problems, they'd been waiting, pacing themselves, keeping their 1979 810cc Honda CB750F on its wheels. They should have known what they were doing: they are the team (Larry Shorts, Scott Stratchan, Keith Marshall, and Dave Richey, with new team member Dan Chivington) who won the 24 hours of Nelson two-and-a-half months before (*Motorcyclist*, November 1979). Marshall pointed out an irony: they completed exactly the same distance, 1888 miles, in the rainy, foggy, 30-hour Rockingham Race as they did in the 24-hour. He also pointed out that they finished on the same original-equipment 630 D.I.D. O-ring drive chain. "The adjuster has only moved one mark since we acquired the bike."

West Can Racing, the Ontario team that finished third overall at Nelson, was second at Rockingham aboard their Kawasaki 1000. They were 15 laps down on Road and Trail, one lap ahead of the Hindle-Price-Castrol third-place Kawasaki.

How did the riders like the race? "It was horrendous really," laughed one bruised rider. "It was so long . . . and so wet."

Roberts Flies In Dirt Track Match Races

By D.J.K. Wilkinson

American-style dirt-track racing was introduced into England for the first time recently and proved a winner. More than 15,000 fans made the trip to the remote Haldon horse track attracted by the unique opportunity of seeing an American team led by 500cc world roadrace champion Kenny Roberts in action against a British team led by the current national speedway champion Peter Collins, on England's only half-mile oval.

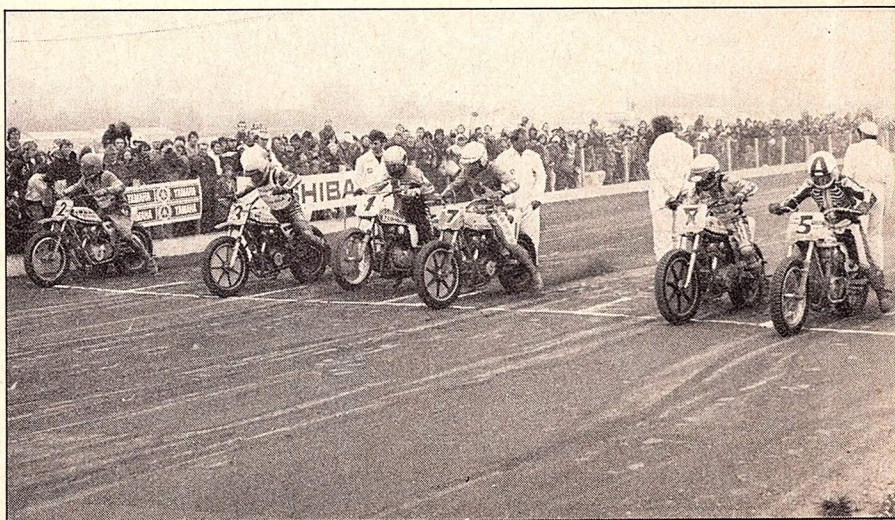
So that both teams would have an equal chance the Match Race organizers flew in six 750cc American dirt-track Yamahas and Shell Thuett, the super-tuner who helped Kenny win several U.S. Nationals, who made the trip along with Kenny's own special Yamaha, a 650 bored out to 750cc, fitted with trick heads and rods making it capable of 70 bhp at 6800 revs.

Appearing with Roberts was Dave Aldana and the two of them gave an exhibition race before the main events to show the crowds what they could expect. Right from the beginning the crowds were cheering them-

selves hoarse as both Roberts and Aldana hoisted their front wheels into the air along the start straight, dropped them down for the narrow turn and immediately hauled them back up at over 90 mph for the entire length of the back straight. As they continued to pop wheelies lap after lap the race announcer was throwing fits. Nothing like it had ever been seen before at the track! He got so carried away with the sight that he kept referring to someone called Stevens out on the race track.

When they finally pulled off the track the announcer went to great lengths to explain to the awed crowds that the actual racing would be different, that the two Americans were just giving an exhibition and could not be expected to perform like that in an actual race. Boy, was he in for a surprise later in the day!

Racing started with a national heat, giving Roberts and Aldana the chance to see the British riders in action on their own machinery, which is totally different to the American



Roberts starts his wheelie antics off the line as the six Yamaha 750s begin a scrap which he and Dave Aldana will win. Toshiba was a major sponsor.

PHOTOGRAPHY NORMAN PULIN

motorcycles. The British use 500cc single-cylinder four-strokes that run on methanol, allowing very high compression ratios and giving them massive hp. Most machines have only two gears although there were some being run with no gearbox at all, just a straight drive off the crankshaft via the clutch. None of the machines feature any brakes at all. In the event of a spill, missing a fallen rider comes down to either skill or pure luck, and the maximum travel of the front suspension is a mere three inches. The British also ride on tires that are of similar design to motocross tires as opposed to the American style which wouldn't look too out of place on pavement.

The English national heats also gave champion Peter Collins time to reflect on his chances. Along with his brother Les, Gerald Shoert and Mike Beaumont, he was to take on the American challenge of Roberts and Aldana and a surprise entry by American Kelly Moran, currently riding for a British speedway team, but moved to the U.S. team for this event. It was the first time that the British champion had ridden a 750, although he was used to racing long-track on the European continent, but only on 500cc singles.

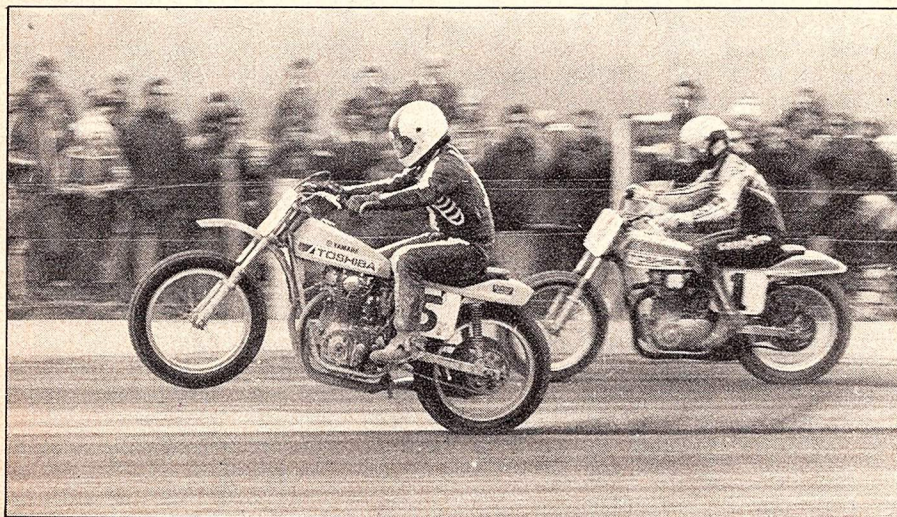
"The 750 is a different machine altogether," he said. "I'm not used to the weight of these machines, or the fact that they have a back brake, and it's a disc brake! I'm also still trying to work out how many gears they have. I just keep on changing up until the box runs out."

The national heats out of the way, it was the turn of the big machines. Lined up were Kenny Roberts, Dave Aldana and Kelly Moran for America with Peter Collins and Les Collins as the only British riders able to make the grid. The big 750 Yamahas sounded frighteningly more powerful

than the 500 singles used so far by the other riders. This was the chance for the British riders to show how well they could go on their borrowed 750s. But style tells, and right from the tape it was Kenny Roberts who took the lead, front wheel in the air! The Trans-Atlantic race was restricted to only five laps so Kenny was out to show how it should be done right from the start. Holding on behind him was Dave Aldana, his machine obviously down on power from Kenny's own Thuett-tuned Yamaha. Kenny was having a ball! Racing on a track with turns much tighter than those in the States he was still able to give an example of how dirt-track should be raced. Yards in front of Aldana, who was in turn yards in front of the next rider Les Collins, Kenny started once more to hoist the front wheel, to be quickly copied by Aldana. That did it! The fans were almost out of control, the announcer started to make choking noises and the press photographers had a riot. As the British riders tailed behind, with the unfortunate Kelly Moran bringing up the rear because he was still off form from a recent crash, the World Champion roadracer and the "Grand old man of the Match Races" did a repeat of the exhibition laps earlier that day. There was no stopping them and that's what the fans wanted to see—the ultimate.

Heat two of the Trans-Atlantic event however proved to be not quite such an easy event for Kenny. A magnificent scrap for the first two laps left the decision open until Roberts managed to ease into the lead, chased by Richard Moore and Les Collins of the British team. Dave Aldana hit a snag when the ignition cut-out attached to his wrist pulled out and it was only by riding the last three laps with his left hand holding

continued on page 81



Aldana dazzled the crowd with his skeleton leathers and 75-mph wheelies. He and Kenny had their way until the Britishers rolled out their speedway bikes.

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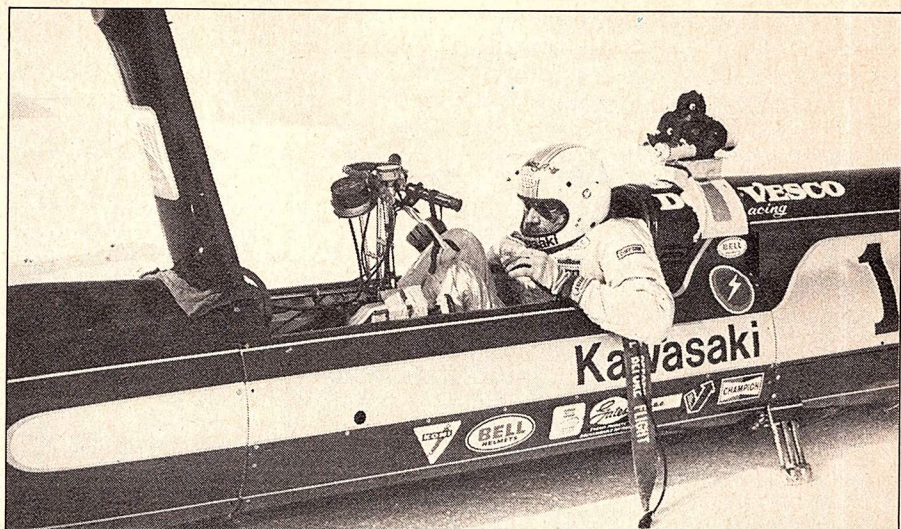
Bonneville Gets New Organizers; Vesco Warms Up For 400-mph Run

By Dorde Woodruff

Tom Elrod would have to be the unofficial Man of the Year among motorcycle competitors at this year's Bonneville Nationals. He is the only rider of a non-streamliner to break a record by averaging over 200 mph since Dave Campos did it in 1974 by running 231.597 on a double-engined water-cooled Harley.

Tom also did it on a double-engined bike, powered by Kawasakis, but he squeaked past 200 by only .022 mph. He's been inching up on the prestigious Bonneville 200-mph Club for ten years now. An IBM computer engineer by profession, he also runs a motorcycle speed shop at home in Austin, Texas. The Elrod crew, overall, had the most success of any group at Bonneville this year. Tom also got a record of 184.701 on a bored-out turbocharged single-engined Zee, and Elrod wrench and rider John Haider got three records on a normally aspirated version, one of them at 174.513, the fastest for a single-engine bike without a blower this year.

The Southern Calif. Timing Association was successful in their first-year sponsorship of the motorcycle portion of the meet, as well as the cars. Resentment of the AMA by riders and SCTA officials had been building for about five years and last spring SCTA finally parted company with the motorcycling organization. Reasons were alleged capricious enforcement of the rules and utter lack of appeal therefrom, lack of cooperation with SCTA in the bookkeeping required to run the meet, and seemingly a complete lack of interest in the salt by Westerville. A meeting at the Stateline Casino on the Nevada side of the border town of Wendover was crowded with motorcyclists invited to share in their own destiny at the Salt Flats for the first time. No radical changes in the rules are planned, just responsiveness to the needs and desires of the riders. Records are under the auspices of



PHOTOGRAPHY: DORDE WOODRUFF, FREUD

On Any Sunday II mounted four cameras on Don Vesco's 'liner and put a microphone inside the cockpit. Once again Don took top speed of the meet.

Bonneville Nationals, Inc., the branch of SCTA which puts on the meets. Talks continue with the National Motorcycle Racing Association, a branch of the well-respected National Hot Rod Association, for possible record certification, also. As far as is known, the AMA doesn't seem to be interested in re-establishing a working arrangement with the SCTA.

Streamliner King Don Vesco was there but not with a new 'liner as expected. Vesco recently sold his motorcycle shop to spend more time pursuing the wheel-driven Land Speed Record of 409.227 set by the Summers Brothers on November 12th of 1965. Selling the dealership and relocating his workshop took too much time to build the new machine. Don has said a racer should run every month to keep his edge. But a salt-flats racer doesn't have this luxury because there aren't that many meets. So Don wasn't about to miss the granddaddy of them all, Speed Week, just because he wasn't ready with his new bike. He'd run the old one, a turbocharged, double KZ1000 Kawasaki built in 1977. Don was hoping to break his own motorcycle LSR of 318.598 mph and collect a \$25,000 contingency from Kawasaki.

When Don decided to go with last year's setup, there was a hitch. The bike was lost. Kawasaki had sent it on one of its European tours and the shippers had goofed on its return. After two weeks it was located in Atlantic City, but there was no paperwork on it, so it was stuck there for three months more. Don got it back a month before Speed Week.

Not only was last year's paint scarred from the bike falling over during that season's runs, and the paint burned on the left side of the cockpit from the turbo's hot exhaust, but also it had suffered during its journey. The nose looked like some-

one had pounded on it with a hammer. Somebody had set off the fire extinguisher in the cockpit, apparently just for fun. Don had to spend \$2500 on bodywork and paint. There was unanticipated damage in the bike's guts from last year's last run. The Vesco crew arrived at the salt on Thursday night of Speed Week with a list of things still to be done.

Don would have liked to whip the car guys at their own game again this year, but there just wasn't time to run that fast, that soon. He was having trouble with the boost control, the smooth operation of which was critical. He qualified on Friday but blew belts again on Saturday, then waited for the AMA and FIM referee, Earl Flanders, to arrive and then to start running on private time on Tuesday after Speed Week.

Some repairs to the turbocharger system made the boost come on more smoothly, but Tuesday's first runs were primarily for the benefit of the "On Any Sunday II" film crew. They positioned one camera just behind the cockpit, another at the left rear, one in the left side of the crowded cockpit itself, and one on the right side just aft of it. The lumpy, large movie cameras had to add a considerable amount of air resistance, but as usual, Don did not complain. He did say that the steering pulled a little with the cameras mounted.

After the first run in the high 200s, and during a routine between-runs check, a tire was found to be damaged. It looked like a cut, always a possibility, especially after Speed Week, during which several cars inevitably blow motors, literally scattering the pieces all over the course. But the outer rubber of the smooth tread of the Goodyear LSR tire had come loose all around the break from the layers below, so Don



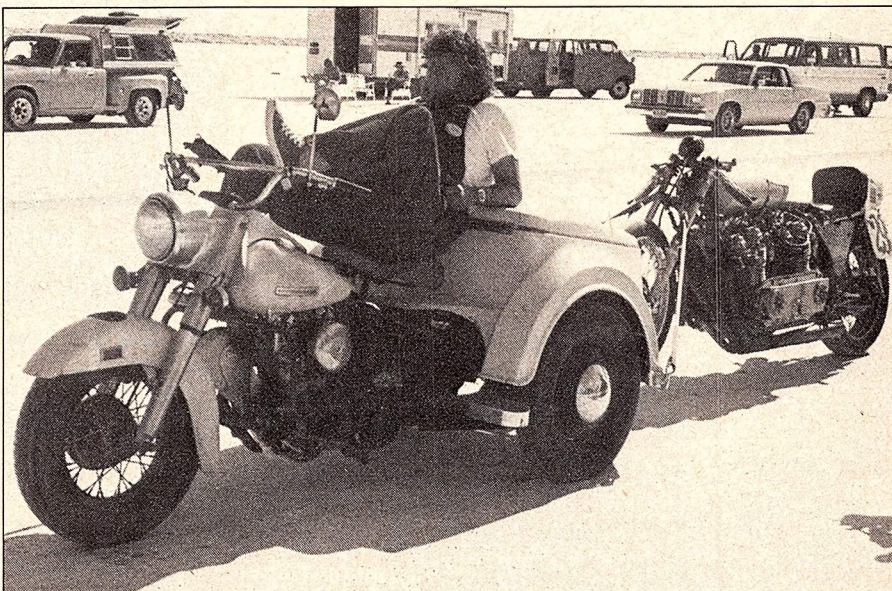
Records Set at Bonneville Speed Week 1979

| Name | Class | Make | Old Record | New Record |
|---------------------------------|-------------|-----------|---------------|---------------|
| Jim Ahrens, Arcadia, CA | M-AG-50 | Kreidler | 70.314 | 78.327 |
| Jim Ahrens, Arcadia, CA | M-AF-50 | Kreidler | 69.633 | 81.314 |
| Jim Ahrens, Arcadia, CA | MPS-AF-50 | Kreidler | 76.686 | 81.606 |
| Jim Ahrens, Arcadia, CA | A-AG-50 | Kreidler | 72.558 | 78.190 |
| Jim Ahrens, Arcadia, CA | APS-AG-50 | Kreidler | 75.364 | 79.129 |
| Mark Lingua, Glendale, CA | A-AB-350 | Honda | 98.000 | 101.277 |
| Bryan Bowns, Citrus Heights, CA | APS-AF-500 | Honda | 152.366 | 153.374 |
| Steve Alexander, Costa Mesa, CA | APS-AB-500 | Honda | 154.301 | 175.813 |
| Mike LaFollette, Dearborn, MI | P-750 | Honda | 138.223 | 142.613 |
| Mike LaFollette, Dearborn, MI | M-AG-750 | MotoGuzzi | 141.284 | 146.199 |
| Charles Toy, Arlington, NB | A-AB-1000 | Kawasaki | 184.507 | 189.869 |
| Richard Coatman, Evans, CO | P-1300 | Honda | 150.345 | 152.630 |
| Richard Coatman, Evans, CO | M-C-1300 | Honda | 150.984 | 153.417 |
| John Haider, Austin, TX | M-AG-1300 | Kawasaki | 165.742 | 168.874 |
| Gerald Wysong, Miami, FL | M-AF-1300 | H-D | 166.014 | 172.303 |
| John Haider, Austin, TX | MPS-AG-1300 | Kawasaki | 166.708 | 174.513 |
| John Haider, Austin, TX | A-AG-1300 | Kawasaki | 163.675 | 167.971 |
| Tom Elrod, Austin, TX | A-AB-1300 | Kawasaki | 178.630 | 184.701 |
| Dave Matson, Westland, MI | M-AG-2000 | Vincent | 163.562 | 164.947 |
| Tom Sauter, Long Beach, CA | A-AG-2000 | Kawasaki | 159.414 | 161.929 |
| Robert Tomrose, Santa Rosa, CA | APS-AB-2000 | H-D | 176.758 | 193.866 |
| Tom Elrod, Austin, TX | A-AG-3000 | Kawasaki | 188.692 | 200.022 |

thought the problem had been a bubble in the rubber.

Tires have been a major problem for Vesco in recent years because Goodyear stopped making their special motorcycle LSR skins in the early Seventies. Don's own supply had become so low last year that he had considered building his own "tires" out of aluminum. But this year he had a whole stack. Don didn't want to comment on the origin of the precious stack next to his tools in the pits, probably most of the world's total supply. But a label on one said "American Honda," which had sponsored the Hawk streamliner some years ago. Apparently Honda had made available their horde of this particular black gold.

Though its first run speed had been affected by the cameras, the bike still hadn't run well. Don was puzzled. He fiddled a bit, then ran again. But he would break no record. The 'liner came to a halt, smoking, in front of the timing trailer and pits. The bike was shaking during the whole run. He could hardly see. Something could have broken during the down run. At first he didn't know if it was just roughness of the track at the far north end, where he hadn't run before this meet. When he got to the middle of the course there was a crosswind, as there often is, from the pass between the two halves of the Silver Island Range. With the wind added to the vibration "I was very busy," he remarked in his usual understated manner, too busy to continue his on-board commentary into the movie crew's cockpit recorder. He'd heard a couple of big bangs during the run and wondered what they were.



Tom Elrod's crew used this genuine H-D Servi-Cycle to tow the twin Kawasaki that put Tom in Bonneville's 200-mph Club. The H-D ran slightly slower.

Someone asked him where he was staying. "Probably at the hangar tonight." If the damage was not repairable at the space he uses at the old airbase in Wendover, they'd go home where there were better facilities.

He did fix the bike that night but the gears broke on Wednesday, probably from previous damage, maybe because the shift fork was bent, or it could have been a seized bushing. Nobody makes gears to fit which are any better than the special Kaw close-ratio racing gears, and they aren't quite good enough, not having been designed for two engines and a turbocharger.

The return run was a wild one again. Running with only first, fourth and fifth, the exhaust header blew. Alcohol fumes filled the cockpit and

he could neither see nor breathe. He popped the cockpit lid which acted as a brake, but then since it opens forward, he really couldn't see. The folks at the timing stand almost had a thrill too. He was going to come in there and park it but decided at the last second that he was going a little too fast.

The bike was found to have a hole in its stainless steel exhaust, something indeed not fixable in the field. They'd return in two or three weeks for a few days to try again.

After that it would be full time on the new 'liner, all blueprinted and planned out this time, stronger and heavier and more powerful. Two KZ1300s will attempt to gun down the Summers Brothers and their 409 mph record.

M



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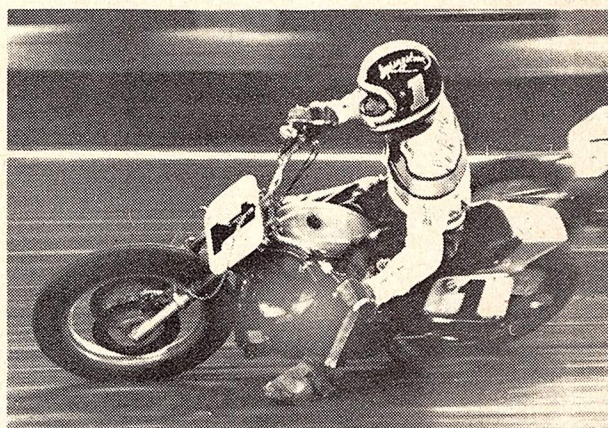
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A



Yamaha Gold Cup Supercross

Feb. 9-10 Seattle Kingdome

General Admission - \$6, Kids 12 & under \$1, Reserved Seats \$8, 10 & 14. (U.S. Dollars) Send self-addressed, stamped envelope and check or money order to: Fidelity Lane Ticket Office, 1622 Fourth Avenue, Seattle, Wash. 98101. Please include \$.25 per order handling charge.

Orders must be received by Feb. 1, 1980.

Bay Area Supercross

Feb. 17 Oakland Coliseum

General Admission \$8, Kids 12 & under \$1. Reserved Seats \$10 & \$12. Send self-addressed, stamped envelope and check or money order to Oakland-Alameda County Coliseum, Nimitz Frwy. & Hegenberger Rd., Oakland, CA. 94621. For further information call: (415) 635-7800. Credit card customers call BASS at (415) 835-4342 or (408) 297-7552. Orders must be received by Feb. 10, 1980.

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Address _____

City _____

State _____ Zip _____ Phone _____

A



SPORT

continued from page 77

the switch in position on the right-hand bar that Dave, dressed for the occasion in his startling skeleton leathers, was able to show British champion Peter Collins the way home.

As a finale the organizers decided to stage a race between Kenny Roberts as world roadracing champion and Peter Collins as the British national speedway champion, with each rider on their own machines, Kenny on the dirt-track 750 Yamaha and Collins on the 500 single Weslake fitted with speedway tires. Just the two of them. And it was those speedway tires that made the difference, for as Kenny's machine fought to grip the shale, Collins roared ahead, and nothing Roberts could do would pull back his lead. Collins streaked ahead, giving his own exhibition ride and there was nothing Kenny could do about it.

Heat One

- | | | |
|-----------------------|--------------|-----|
| 1. Kenny Roberts..... | USA..... | Yam |
| 2. Dave Aldana..... | USA..... | Yam |
| 3. Les Collins..... | England..... | Yam |
| 4. Peter Collins..... | England..... | Yam |
| 5. Kelly Moran..... | USA..... | Yam |

Heat Two

- | | | |
|-----------------------|--------------|-----|
| 1. Kenny Roberts..... | USA..... | Yam |
| 2. Dick Moore..... | England..... | Yam |
| 3. Les Collins..... | England..... | Yam |
| 4. Dave Aldana..... | USA..... | Yam |
| 5. Peter Collins..... | England..... | Yam |

For the British fans it was a unique race. In Britain, more than in America, motorcycle sport is split into factions. Motocrossers don't go to dirt-track races, roadracing fans avoid speedway and so on. But here it was, the top roadracer in the world had drawn the fans to a dirt-track event and the conflict between patriotism and their own branch of the sport, for the roadracers, was something to see. Who should they be cheering on? As it turned out they cheered an excellent race between two top exponents of their own branch of racing and the result wasn't really all that important. It was a good day's racing.

While being interviewed for British television, after the races, Kenny was asked how he managed to ride the dirt so well after a two-year break. His answer? "Riding a dirt bike is like riding a woman, you do it once, you just don't forget." The TV producer started to tear out his hair. End of interview.

TOP FUEL BATTLESTAR

continued from page 24

"At Ontario on the 8.04 run I could have gone into the sevens but I shut the throttle real fast 200 feet short of the lights when the seat flew up in my face. I thought the whole body was coming off and it scared me to hell."

Once they get everything glued down the Vance/Hines team very likely will put their Suzuki into the sevens. But it will be a costly effort. Tracy Nelson calculates his work in designing the body was the equivalent of \$10,000. Byron figures \$15-20,000 for what he did with the bike itself. The team can handle these and the many other expenses involved in Top Fuel drag racing in part because, as Terry says with some pride, "I'm the only person involved in motorcycle drag racing with a factory sponsor." But he's not likely to bear that distinction alone much longer. Those who should know are saying that drag crowds are becoming more and more turned on to the bikes. Others add that bikes will become the sports cars of the next decade, with greater public acceptance. And since everyone who's ever straddled a bike has dragged something from a stoplight sometime, most people can probably relate to drag racing more readily than to motocross or roadracing.

That being so, and with the prospect of more factory sponsorships being offered soon, we asked Byron how the different bike motors stack up as potential dragster power units. "Kawasaki and Suzuki both have good motors. Both have little things wrong with them, but they even up. Nobody's run a Suzuki hard enough to split one. The GS1000 motor has pretty good thickness through the head surface. The way the KZ1000 seats are put in the heads—or something—a blown motor will split the head right through the spark plugs. The Suzuki has slightly more potential than the KZ1000 if you figure valve sizes. Other than that they're fairly equal.

"Somebody is building a KZ1300 engine. It should be good because the 1300 has a good crank. The KZ1000 and the GS1000 both have built-up cranks and you have to do a lot of work to keep them together. The Yamaha XS Eleven has a good one-piece crank. Right now it may be the best engine for fuel racing. The CBX has too short a stroke and the crankshaft is a little weak. It's also expensive."

Byron thinks for a bit. "If we can get a 16-valve GS1100 motor we'll put it in our bike. It should be interesting." Indeed. Says Terry, "This year we went out to check the bike and teach me how to ride Top Fuel. Next year we'll win some races. No question of that."

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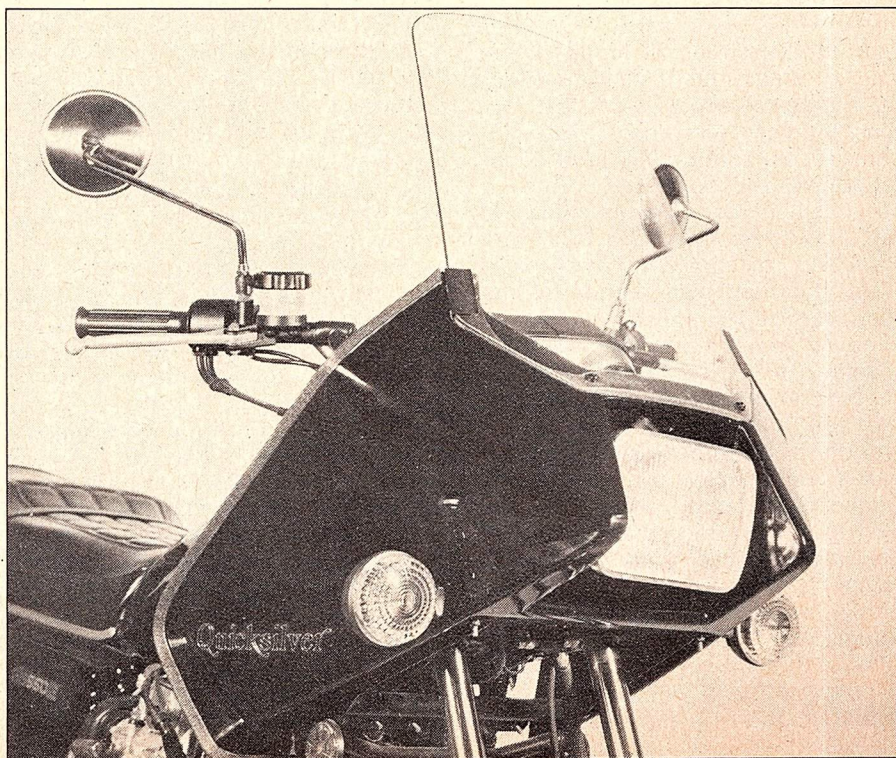
The Quicksilver, which has been on the drawing boards since 1974, was intended to fit somewhere between the handlebar-mount windshield fairing and the heavier and bulkier full touring fairing such as the Windjammer. The idea of a handlebar-mounted fairing was apparently rejected because of its effects on handling and its limited wind protection.

The frame mounted Quicksilver weighs just 16 pounds with hardware and mounts, but its wedge-like shape and 25-inch width indicate that it will offer plenty of protection from the wind and weather. Two windshields are available; the Sport shield is about four inches shorter than the Standard shield. Instead of the built-in turn signals of the Windjammer,

the Quicksilver uses stalk-mounted black-accent signals. The standard headlight is a rectangular tungsten sealed beam. A rectangular quartz sealed beam will also be available as a replacement part (to be installed after you have the fairing) or can probably be obtained from an auto supply store since these rectangular beams are now standard on many automobiles.

Like the Windjammer, the Quicksilver has a black pebble-grain interior with two tonneau-covered storage pockets. The fairing's edges are covered with the usual black trim. The Quicksilver will be available in black, white or (naturally) silver.

Initially, mounting systems will be available for: BMW R65; Honda CB/CM400 Hawks, CX500, CB650 and CB550; Kawasaki KZ650; Suzuki GS550; Yamaha RD400 (including Daytona Special) and XS400. Brackets for other middleweight makes and models are being designed and will be available soon. The Quicksilver will go on sale about January 1, 1980. Suggested retail price is \$199 including all hardware and mounts. For more information contact the Vetter Corporation, Route 136 East, Rantoul, IL 61866. A free brochure is available.



EDITORIAL

continued from page 4

Middle East oil. You think you've seen shortages, just wait until that happens.

Worse yet: If you like bikes, the chances are you're young enough to be draft bait. The people who know say the big guns are going to speak, and none of Joan Claybrook's helmets will save you from their bullets.

How real is all this? What does a motorcycle magazine know about Persian Gulf security? **U.S. News & World Report**, most certainly a source with credibility in these matters, says: "... the Persian Gulf leaders are keeping a wary eye on Moscow. A Bahraini official puts it this way: 'The Soviets are close, and we cannot have good relations with them. They want to swallow us.'

"Bahraini Foreign Minister Sheik Mohammed al Khalifa agrees: 'We hear Russia will be short of oil in the 1980s, and that makes us a target.'

"The Gulf Arabs feel hemmed in by the strong Soviet presence in South Yemen and Ethiopia on one side and in Afghanistan on the other. The U.S. is aware of Russian designs on the Persian Gulf and of the potential threat to American oil supplies."

If you still don't believe "Russian designs on the Persian Gulf" can lead to war, consider the following: Supposing Russia uses gold or platinum to pay for oil. The Arabs, an eager lot as we have come to see in recent years, will gladly take millions of barrels from our ration, paid for with inflated dollars, to supply Russians paying with precious metal. Hello gas lines. Goodbye dream trip on your motorcycle.

Either way, war or gold, we stand to lose. Better get as many good times on your bike as you can now, while you still can. Make the riding season of 1980 the one to remember. Start doing it now.

RIDER VOTE

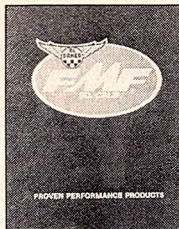
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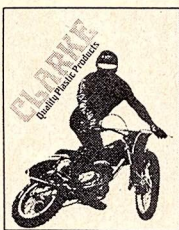
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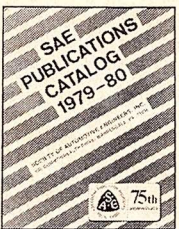


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HOTLAP

DECOSTER QUILTS, GOES TO HONDA

Although he won't race in 1980, Roger DeCoster has signed with Honda as a racing team manager. DeCoster was expected to retire after the 1979 season and was reportedly "angry" after talks with Suzuki personnel. He will be based in the U.S., out of his Santa Barbara, California home.

NMRA ANNOUNCES BIG 1980 RACE SCHEDULE

If burning rubber and stinging nitro turns your senses on, then the National Motorcycle Racing Association (NMRA), a Division of the National Hot Rod Association, is your ticket—they've got a whole series of National Championship events scheduled for the coming year.

NMRA 1980 Drag Schedule

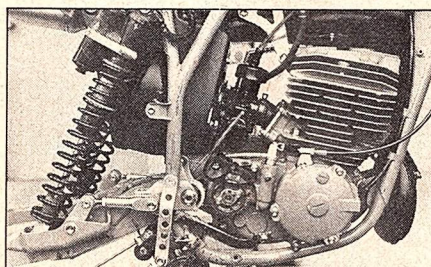
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|------------------------------|------------------|
| * March 14-16..... | Gainesville, FL |
| April 12-13..... | Gainesville, FL |
| * April 25-27..... | Baton Rouge, LA |
| May 24-25..... | Epping, NH |
| June 14-15..... | Cincinnati, OH |
| July 4-5..... | Indianapolis, IN |
| August 9-10..... | Fremont, CA |
| † August 27-September 1..... | Indianapolis, IN |
| September 27-28..... | Atco, NJ |
| † October 4-5..... | Ontario, CA |

*Pro Stock Event Only

† Top Fuel Event Only

WOLSINK TO MAICO

Gerrit Wolsink will apparently return to Maico as a factory rider. As reported last month, Wolsink was dropped by Suzuki after his second-place finish in the world 500cc motocross championship. After talks with Yamaha and Kawasaki, Wolsink reached an agreement with the German firm, which gave him his first factory ride and first GP win in 1973. Does this mean that Maico will win the 1980 500cc USGP?



HONDA DEBUTS NEW MXR WITH VLRS REAR SUSPENSION

One of the most interesting bikes at the Trans-USA Series was an all-new Open Class Honda called the RC400-80. Its rear-end geometry is most unique: the variable leverage ratio suspension (VLRS) perfects similar concepts offered by Joe Bolger for Ossa motorcycles, and by the Skunk Works almost five years ago. By attaching the shock to the swingarm by way of a bell crank which pivots on the swingarm and also attaches to the frame, the leverage ratio varies as the swingarm moves. By varying the ratio from lower to higher as the suspension travels from full extension to full compression, damping is softer for the smaller bumps usually encountered when the suspension is extended and firmer for the larger bumps usually encountered when the suspension becomes compressed. Steve Wise seemed to like his VLRS Honda in the Trans-USA series. The engine is also completely new, extremely compact and likely undersquare in its displacement of around 400cc. Honda isn't talking much yet, but it's believed Graham Noyce will use an RC400-80 in defense of his World 500cc Championship later this year.

HANNAH RECOVERS FROM BROKEN LEG

Right around Christmas Bob Hannah should begin training after a "very boring" three-month recovery from his broken leg. He snapped it late last summer

in a water ski accident that made him miss the Trans-USA series. The mobile Mr. Hannah spent time recovering in San Diego, Quartz Hill, Carson City and in his new "favorite place," Sun Valley, Idaho. He killed time by organizing his gun collection, shooting trap and reading magazines. Doctors predict he'll have no complications from the break.

GOLDEN STATE SERIES BOASTS \$75,000 PURSE

Can-Am motorcycles will be the main sponsor of the 1980 Golden State Series, which gives pros and amateurs alike a chance to warm-up for the season ahead. In the past such stars as Ron Turner, Gaylon Mosier, Rex Staten, Danny Chandler and Brian Myerscough have won classes which also carry the title of California State Champion. This year Bob Hannah is likely to begin his comeback after a broken leg at the CMC-promoted series. Most events have a host of races in sportsman and pro classes, such as the opener at Saddleback Park on January 5 with Sportsman Day followed by Pro events on Sunday, January 6, 1980.

SHEENE DROPS SUZUKI

According to sources overseas, twice World Champion Barry Sheene has broken a seven-year arrangement with Suzuki by refusing to renew his 1980 contract. The move came not long after Suzuki announced that they would stop production of certain race bikes which would tighten the parts squeeze already suffered by many competitors. Sheene received an alternative contract offer some time ago, supposedly with a large company outside the motorcycle industry, and it is believed he will now accept it. If this is the case, he will likely ride Yamahas, but it's no secret that he recently bought three Suzuki RG500s "for his own use."

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